

**A STUDY OF SUBSTANCE ABUSE AMONGST A GROUP OF HIGH SCHOOL
LEARNERS IN THE EISLEBEN (BOTLOKOA) AREA OF THE LIMPOPO
PROVINCE**

By

KHOLOFELO ANNAH RAKUBU

[B.A., B.A Hons]

Submitted in fulfillment of the requirements for the degree of

MASTER OF ARTS

in the subject

CRIMINOLOGY

UNIVERSITY OF LIMPOPO (TURFLOOP CAMPUS)

SOUTH AFRICA

SUPERVISOR: PROF CJ MOOLMAN

DATE: MAY 2007

b11711528
i12383727



DEDICATION

This work is dedicated to my late grandparents, Molelo Joseph and Modikwa Violet Rakubu, my late brother Mpolokeng Rakubu and my daughter, Matshidi.

ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to the following persons:

Prof C.J Moolman, my supervisor, for his guidance, encouragement and patience. It is through the interaction with him that I was able to understand the many issues involved in substance abuse and related areas. I thank you for your intellectual input and the guidance you gave me throughout the conduct of this study.

Mr. D.L Kgosimore, Head of Department of Criminology, for his academic guidance and the support he showed me when things were not quite the way I wanted them to go. Thank you for your unwavering support and encouragement, and for your detailed comments on earlier drafts of this work. You also introduced me to the right people who also helped me finish this study. Many thanks.

My mother, Mothii Lizzy Rakubu, for her love, encouragement, support and for giving motherly care to my daughter while I was busy with this study.

My uncle, Ngoako Herman Rakubu, for his love, acting like a father and supporting me in all manners especially financially. The expression “ You are a star”, is for you.

My late uncle, Maforane Jack Rakubu, for his love and believing in me. Rest in peace.

Dr Dhliwayo, for reading the draft and giving valuable comments that helped shape up this work.

Prof Sithole, for his intellectual support throughout my studies.

My fiancé, Matsosa Mothibi and my younger brother, Jimmy Rakubu, for their love and support.

Miss Dikeledi Senoamadi, for her help with the administration of the questionnaires.

Principals and teachers, of Seale Secondary and Tabudi High school for giving me permission to conduct research in their schools.

All high school learners who participated in this study.

Dr Olwagen, University of Limpopo Statistician, for the statistical analysis.

Dr Mkuti, for polishing up the language.

DECLARATION

“ I declare that the Dissertation hereby submitted to the University of Limpopo for the degree of Master of Arts has not previously been submitted by me for a degree at this or any other university, that it is my own work in design and in execution, and that all material contained therein has been duly acknowledged.”

LIST OF TABLES

5.1 Frequency distribution of gender	106
5.2 Frequency distribution of age	107
5.3 Frequency distribution of religion	108
5.4 Frequency distribution of educational level of respondents	109
5.5 Frequency distribution of respondents' mothers' educational level	110
5.6 Frequency distribution of respondents' fathers' educational level	110
5.7 Frequency distribution of respondents' guardians' educational level	111
5.8 Frequency distribution of the person that the respondent is living with	112
5.9 Frequency distribution of respondents parent's whereabouts	113
5.10 Frequency distribution of respondents' parental marital status	114
5.11 Frequency distribution of respondents' number of siblings	115
5.12 Frequency distribution of respondents' mothers' employment	115
5.13 Frequency distribution of respondents' Fathers' employment	116
5.14 Frequency distribution of respondents' guardians' employment	116
5.15 Frequency distribution of respondents' monthly family income	117
5.16 Frequency distribution of respondents' substance abuse	118
5.17 Frequency distribution of respondents' marijuana use	118
5.18 Frequency distribution of respondents' cocaine use	119
5.19 Frequency distribution of respondents' alcohol use	119
5.20 Frequency distribution of respondents' cigarette use	120
5.21 Frequency distribution of respondents' snuff use	121
5.22 Frequency distribution of respondents' glue use	121

Chapter Three: Factors Contributing towards Substance Abuse Amongst Adolescents

3.1 Introduction	62
3.2 Social and Community Factors Associated with Substance Abuse Amongst Adolescents	62
3.3 Social Variables (Family Environment)	72
3.4 Psychological Variable (Psychological Factors)	78
3.5 Summary	84

Chapter Four: Theories of Substance Abuse

4.1 Introduction	86
4.2 Psychosocial Perspectives	86
4.3 Sociological Perspectives	91
4.4 Psychopathological Perspectives	97
4.5 Summary	102

Chapter Five: Analysis and Interpretation of Findings (Results)

5.1 Introduction	105
5.2 Analysis of Personal Information	106
5.3 Analysis of Educational Level	109
5.4 Analysis of Family Characteristics	111
5.5 Analysis of frequencies of Substance Abuse	117
5.6 Analysis of Characteristics of Drug Abuse	122
5.7 Analysis of Funding of Drugs	127
5.8 Analysis of Suppliers of Drugs	128
5.9 Analysis of Effects of Drugs	129
5.10 Analysis of School authorities and Abuse of Substances	131

5.11 Analysis of Parents/Guardians and Drug Abuse	133
5.12 Analysis of Factors Causing Substance Abuse	135
5.13 Analysis of Criminal Involvement and Drug Abuse	138
5.14 Summary	140

Chapter Six: Conclusion and Recommendations

6.1 Introduction	142
6.2 General Summary	142
6.3 Evaluation of the Study	146
6.4 Recommendations	150
6.5 Conclusion	152
7. Reference	153
8. Appendix A: Letter to the schools principals	164
9. Appendix B: Unstructured Interview Schedule (Questionnaire)	165
10. Appendix C: Ethics Form	172

5.23 Frequency distribution of respondents' age at first using drug	122
5.24 Frequency distribution of respondents' place of abuse	122
5.25 Frequency distribution of respondents' circumstances for drug use	124
5.26 Frequency distribution of respondents' frequency of substance use	125
5.27 Frequency distribution of where respondents' learnt to abuse substances	126
5.28 Frequency distribution of respondents' money suppliers	127
5.29 Frequency distribution of other means by which respondent fund their drug use	127
5.30 Frequency distribution of respondents' place of buying substances	128
5.31 Frequency distribution of respondents' drug suppliers	129
5.32 Frequency distribution of respondents' knowledge regarding effects of drugs	129
5.33 Frequency distribution on how respondents' view of the effects of drugs	130
5.34 Frequency distribution of school authorities' knowledge regarding learners' substance abuse	131
5.35 Frequency distribution of measures taken by schools	131
5.36 Frequency distribution of the effectiveness of taken measures	132
5.37 Frequency distribution of parents' knowledge of their children's substance abuse	133
5.38 Frequency distribution of parents or guardians' measures against drug abuse	134
5.39 Frequency distribution of factors encouraging learners to abuse substance	135
5.40 Frequency distribution of involvement in criminal activities	138
5.41 Frequency distribution of types of crimes committed	139

TABLE OF CONTENTS

PAGES

Chapter One: General Orientation to the Study

1.1 Introduction	1
1.2 Background of the problem and significance of the study	3
1.3 Problem Statement	3
1.4 Aim of the Study	5
1.5 Objectives of the Study	5
1.6 Substantiation	5
1.7 Delimitation of the Study	5
1.8 Research Question	7
1.9 Assumptions of the Study	8
1.10 Research Methodology	8
1.11 Ethical Consideration	11
1.12 Division of Chapters	12
1.13 Summary	12

Chapter Two: Incidences and Effects of Substance Abuse and Its Relation to Crime

2.1 Introduction	14
2.2 General Orientation	14
2.3 Alcohol	23
2.4 Marijuana	36
2.5 Cocaine	49
2.6 Summary	58

CHAPTER 1

GENERAL ORIENTATION

1.1 INTRODUCTION

Substance abuse in South Africa has reached epidemic proportions. The most abused substance is alcohol. Alcohol is a major cause of crime, violence and moral decay in South Africa. Between 65% and 70% of violent crimes in Cape Town can be attributed to the intake of alcohol (Khan, 2002:52).

Substance abuse amongst high school students in South Africa is of great national concern. With the change in the government and its stance on democracy, a National Strategic Action Plan (NSAP) for the prevention of substance abuse among the youth in the country was developed by the South African Alliance of Prevention of Substance Abuse (SAAPA) in 1999. The aim of the SAAPA is to encourage networking amongst all organizations, both government and civil society, concerned with substance abuse in South Africa. Unfortunately this organization has not yet started functioning in Botlokoa.

Further, in response to the high rate of substance abuse amongst students, the South African government is joining hands with the United Nations International Drug Control Programme (UNDCP). This organization supports the establishment of ten community centers for counseling, treatment and rehabilitation of substance abusers in the most affected parts of the country. A study that explores the underlying factors contributing towards substance abuse amongst high school learners in Eisleben village, Botlokoa Ga-

1.2 BACKGROUND OF THE PROBLEM AND SIGNIFICANCE OF THE STUDY

The problem of substance abuse (the use of illegal substances such as marijuana, cocaine, alcohol,) has increased recently in schools in Eisleben village, Botlokoa Ga-Ramokgopa. As a result there is a high failure rate at the end of each academic year. It is assumed that there is a close link between this problem and the high truancy rate, poor homework responses and the lack of concentration by students during classes. Aggressiveness towards teachers and elders, which sometimes leads to conflict and scuffles between teachers and pupils, also appear to be associated with substance abuse.

1.3 STATEMENT OF THE PROBLEM

Substance abuse is a phenomenon experienced by children and adolescents worldwide. It appears that children become victims of substance abuse at a progressively younger age (Trojanowicz, 1992:409). The more one smokes marijuana, for instance the higher the chances are of one developing mental problems. The main psychoactive ingredient in dagga is the THC (Delta-9-tetrahydrocannabinol). This chemical is thought to be the root cause of the negative mental side effects of the drug. It causes the release of dopamine, which can later lead to paranoia and violence. Trojanowicz (1992:410) further argued that it has been recognized throughout the world that the connection between the use of drugs and illegal behavior is high. The relationship between drugs and crime will be examined in the next chapter.

The situation in South Africa is not different from the situation in other countries. The reported drinking, smoking of dagga and tobacco among the youth in a nationwide survey

is very high, especially among males. Alcohol rehabilitation is presently costing the South African government approximately R10.6 billion annually while narcotic rehabilitation sets the country back approximately R2.5 billion a year (Khan, 2002:52).

Alcohol and tobacco are substances that children are not allowed to possess or use. According to the Tobacco Control Act, Act 83 of 1993 “the sale of tobacco products prohibits persons under the age of 16 to purchase or consume it”. The Liquor Act 27 of 1989 states that “no person shall sell or supply liquor to any person under the age of 18”. Marijuana and cocaine are also illegal substances. According to the Drugs and Drug Trafficking Act 140 of 1992 “ marijuana is an undesirable dependence producing substance and is therefore a controlled substance listed in Part 3 of schedule 2 of the Act and persons found in possession of such substances are immediately arrested and prosecuted”.

The above-mentioned substances are very dangerous. Marijuana has serious effects on the mind. There are short-term effects that include reduced ability to perform tasks requiring concentration and coordination, and the long-term effects include increased risk of infertility. Cigarettes are also addictive. One-third of young people experimenting with it end up being addicted by the time they are twenty. The risks associated with smoking cigarettes are strokes, heart disease and lung cancer. Consumption of alcohol leads to more serious problems associated with heart disease and social pathology. Cocaine also has physical risks associated with the increase in blood pressure and brain seizures (Fields, 2001:80).

1.4 AIM OF THE STUDY

The aim of this study is to explore the contributory factors that lead to substance abuse amongst a group of high school students in Eisleben village, Botlokoa Ga-Ramokgopa

1.5 OBJECTIVES

The objectives are as follows:

To explore and understand the underlying factors that contributes towards substance abuse amongst a group of high school students.

To identify high-risk areas where these students learn or associate with addicts and learn about drugs.

To help the school community find solutions to drug abuse.

1.6 SUBSTANTIATION

The researcher was born, brought up and educated in Eisleben village, Botlokoa Ga-Ramokgopa and is very familiar with the problems in the local schools and in the community. The rate of substance abuse has led to illiteracy, juvenile delinquency, high failure rate, sexually transmitted diseases and teenage pregnancies. The culture of learning has seemingly collapsed and the researcher intends to explore the factors that contribute towards substance abuse by young adults.

1.7 DELIMITATION OF THE STUDY

1.7.1 Concept delimitation

Drug

Drug refers to any chemical that produces a therapeutic and non-therapeutic effect in the body (Harrison, Fulkerson & Beebe, 1997:629).

Marijuana

Marijuana is a green or grey mixture of dried, shredded flowers and leaves of the hemp plant (Harder, 1997: 159).

Adolescence

Adolescence has been defined as the life phase between puberty and adulthood (Alvarado, 2002:2). It is also defined as a period between childhood and adulthood (Sutherland, 2001:88).

Substance Abuse

Substance abuse is regarded as the excessive, illicit use of alcohol and drugs to a point where a person develops dependence on substances and is unable to function effectively (Trojanowicz, 1992: 407).

Cocaine

Cocaine is a stimulant that makes users feel high, energetic and mentally alert. It is a powerful addictive stimulant that directly affects the brain (Bartollas, 1997:336).

Tobacco

Tobacco can be described as a broad-leafed plant, whose dried and cured leaves are smoked in the form of cigarettes (Oakley & Charles, 2002:304).

Alcoholism

Alcoholism is the pathological drinking behavior (e.g. remaining drunk for two days), to impaired functioning (e.g. frequently missing work), or to physical dependence (Oakley & Charles, 2002:421).

1.7.2 The research area

The study was conducted in Eisleben Village, Botlokoa Ga-Ramokgopa. It is a planned rural area, situated about 35 kilometers from the Tropic of Capricorn. The study was conducted in two high schools situated in the Eisleben village in Botlokoa area. The two high schools are Seale and Tabudi High Schools, each with a total enrolment of over one thousand students. The schools are about two kilometers away from each other. Both are co-educational schools, catering for students from grade 8 to 12. According to the school principals, the age ranges in the schools vary from 13 to 23 years. The students are all residents of the Botlokoa area.

1.8 RESEARCH QUESTIONS

The key research questions are:

What are the underlying factors that contribute towards substance abuse amongst this group of high school students?

What are the influences that may contribute towards the use of illegal substances amongst the research group?

1.9 ASSUMPTIONS

This study assumes that:

Adolescents raised within dysfunctional families will resort to drugs as a form of escape from their family problems.

The use of drugs among parents is associated with the experimentation of various substances by adolescents.

Association with substance users during adolescence can influence adolescents to adopt similar practices.

1.10 RESEARCH METHODOLOGY

Research methodology is the most important part of research, as it comprises tools and techniques namely, research design, population, sampling and data collection methods, upon which the entire research will be based. The term research methodology can be used to describe the art of investigating something (Babbie, 1992:89).

1.10.1 Type of research

The researcher used the quantitative research method in order to give a statistical description of the respondents' personal information, educational level, family characteristics, substance abuse scale, characteristics of drug abuse, funding of drug abuse, suppliers of drug abuse, the effects of drugs, school authorities and the abuse of substances and parents/guardians and drug abuse. Factors encouraging learners to use substances and criminal involvement and drug abuse also received attention. This

research was therefore, conducted on the verbal scientific and statistical levels of description.

1.10.2 Research design

The term 'design' means "drawing an outline" or planning or arranging details. It is a process of making a decision before the situation arises in which the decision has to be carried out. Research design is planning a strategy of conducting a research (Ahuja, 2001:120). The researcher used an exploratory study on the descriptive level because little is known about substance abuse in the Botlokoo area. The purpose of the exploratory design is to explore the phenomenon and to gather preliminary facts in the process.

1.10.3 Population and sampling

The population is comprised of students from grade 8 to 12 at the Tabudi and Seale High Schools. The sample is made up of both males and females who abuse substances, with the age ranging from 13 to 19 years. The researcher used non-probability sampling methods because the probability of any particular member of the population being chosen was unknown. The non-probability sampling used is purposive sampling and snowball sampling.

(i) Purposive Sampling

In purposive sampling, the researcher purposefully chose persons who reflected the appropriate characteristic required of the sample members, such as substance abuse, which is relevant to the research topic.

(ii) Snowball (Networking) Sampling

In snowball sampling, the researcher began the research with a few respondents who are known abusers. Subsequently, these respondents identified other respondents that met the criteria of the research, which in turn identified more respondents. The process continued until adequate numbers of persons were interviewed or until no more respondents were discovered.

1.10.4 Data collection

The researcher will be using quantitative methods of data collection. Questionnaires were used to gather information from the respondents. The researcher was personally involved in the data-collection process. This technique is deemed appropriate because it would enable the researcher to create a non-threatening environment, wherein respondents would feel comfortable to share their views with regard to substance abuse.

Sixteen (16) open-ended questionnaires were administered to the respondents from Seale High school and 14 questionnaires were given to respondents from Tabudi High school. These were the numbers of respondents that were generated from the respective schools through the sampling process. The questions were written in English and the researcher clarified some of the difficult terms. Additionally, the researcher consulted books, scholarly and professional journals, and also used the Internet to assist with the construction of written questionnaires.

On the dates agreed with the schools, the researcher was given a class to network and identify students who abuse substances. The researcher sought the co-operation of the teachers depending on the size of the class, the student's age range and the periods. The researcher was given guidance on study periods to avoid disrupting lessons and causing disorganization among the students. Before choosing respondents, students were first informed of the purpose of the research and were allowed to ask questions regarding the study and those who did not want to participate in the study were excused.

1.10.5 Data analysis

Data was analyzed using Statistical Package for Social Science (SPSS). The outcome determined the causes and levels of substance abuse amongst students.

1.11 ETHICAL CONSIDERATIONS

Ethics are the rules suggesting expectations about the most correct conduct towards experimental subjects. It is important that the researcher should not overlook these rules since they are widely accepted in any professional fields of research (De Vos, 1998:24).

In this study the researcher considered the following:

1.11.1 Informed consent

The respondents were not coerced to participate in the study although they were encouraged to do so.

1.11.2 Privacy or voluntary participation

Participation in research was voluntary and the learners were free to refuse to divulge certain information about them.

1.11.3 Anonymity

Participants' rights and wishes to remain anonymous were respected. In this case, numbers instead of names identify respondents.

1.11.4 Confidentiality

Respondents were assured that the information they gave would be treated with the strictest confidentiality. Assured of this condition, the respondents felt free to give honest and complete answers.

1.11.5 Emotional and psychological constraints

The researcher was sensitive to the emotional and psychological well being of the participants throughout the study.

1.12 DIVISION OF CHAPTERS

The first chapter of this dissertation serves to orientate the reader about the conducted research. The second chapter will focus on the connection between substance abuse and crime. In chapter three the causes of substance abuse will be highlighted as revealed by existing research. Explanations for substance abuse will be offered in chapter four while the research findings will be discussed in chapter five. The last chapter, Chapter six will be devoted to the conclusions and recommendations.

1.13 SUMMARY

Substance abuse in South Africa has reached epidemic proportions and substance abuse among high school students in South Africa is of great national concern. The most

abused substance is alcohol. This study is of great significance because it explores the factors that contribute towards substance abuse. It also contributes to the literature pertaining to abuse amongst students.

Substance abuse has become entwined with delinquent behavior and there is a strong correlation between substance abuse and crime. Substance abuse is a phenomenon experienced by children and adolescents worldwide and it appears that children become victims of substance abuse at a progressively younger age. The more one abuses marijuana, alcohol, cocaine, cigarettes etc. the higher the chances of one developing mental problems. The situation in South Africa is not different from that of other countries. The reported drinking, smoking of dagga and tobacco amongst the youth in a worldwide survey is very high, especially amongst males.

The researcher aims to explore the factors contributing towards substance abuse amongst high school students in Eisleben village, Botlokoa Ga-Ramokgopa. The researcher also intends to identify high-risk areas where students learn or associates with other addicts; and to help the school community come up with solutions. Delinquency, high failure rate, illiteracy, sexually transmitted diseases and teenage pregnancies, motivated the researcher to explore the phenomenon of substance abuse.

In the next chapter, the researcher explores the relationship between substance abuse and crime.

CHAPTER 2

THE INCIDENCE AND EFFECTS OF SUBSTANCE ABUSE AND ITS RELATION TO CRIME

2.1 INTRODUCTION

The previous chapter contains a general orientation towards the research, a discussion of the research methodology as well as its delimitation. In this chapter, an overview of the incidence and effects of substance abuse will be discussed and its relation to crime will be highlighted.

The first section contains an orientation on the correlation between drugs and crime. The second section looks specifically at the relationship between crime and alcohol, including the long and short-term effects of abusing alcohol. The third section focuses on the relationship between marijuana and crime, form of appearance, method of use, adverse effects, habituation, overdose potential and the withdrawal effects of marijuana. The fourth section examines the relationship between cocaine and crime. The form of appearance, method of use, adverse effects, habituation, overdose potential and the withdrawal effects of all these substances are discussed in this section.

2.2 GENERAL ORIENTATION

Over the past years, South Africa has experienced a political transformation that has riveted attention around the world. A country once known for its policy of racial segregation or apartheid has emerged as a new democracy with a racially integrated government of national unity. South Africa is now one of the most sought after tourist

destinations and has attracted foreign investments from every major country around the world. Ironically, it is also emerging as one of the most lucrative countries for drug trafficking, substance abuse and the crime that typically follows (Walters, 2000:54).

The relationship between crime and the use of alcohol and other drugs has received a great deal of attention in previous research. Studies have generally revealed a positive association between criminal behavior and substance abuse. An important aspect of this association has been the degree to which violent crimes are linked to substance abuse. Among delinquents, the familiar categorization of “person offenses” versus “property offenses” further implies that differences exist between two types of offenders in terms of the nature of alcohol and drug involvement. It is commonly assumed, for instance, that violent crimes are more likely to be committed by persons who abuse hard drugs (heroin and cocaine), while less serious crimes (offenses against property) are committed by users of alcohol and marijuana (O’Donnell in Dawkins (1997:134)).

According to Walters (2000:56), drugs are related to crime in multiple ways. Most directly, it is a crime to use, possess, manufacture, or contribute drugs classified as having a potential for abuse. Drugs are also related to crime through the effects they have on the user’s behavior and by generating violence and other illegal activity in connection with drug trafficking.

While statistical patterns, Walters (2000:56), strongly suggest that psychoactive substances play significant roles in acts of violence, they do not explain the nature of

those relationships. In trying to establish a connection between violence and substances, potential links were recognized in terms of the four levels noted below:

2.2.1 Social and Economic forces (Macrosocial)

These are the processes that affect large social units such as nations or communities. Examples include cultural practices related to alcohol use, economic and social processes surrounding the illegal markets in which psychoactive drugs other than alcohol are sold. The relationship between illegal drug market activity and lethal violence are entwined with social and economic processes in the community. Fragments of evidence, Goldstein (1985: 218), suggest that some or all of the following factors may influence the relationship between levels of violence and illegal drug market activity:

- (i) **Stability of drug market control.** Situations that produce violent encounters, such as fights over territorial allocations or misunderstandings between buyers and sellers. Where the spread of crack manufacturing technology encouraged new organizations to enter the markets, the resulting destabilization may temporarily have increased the frequency of violent encounters.

- (ii) **Community access to legitimate economic opportunities.** Where the rise of crack markets followed the exodus of legitimate economic opportunities from central cities, economic rewards shifted away from

skills valued by legitimate employers to those valued by crack distribution organizations; these included the ability to threaten and use violence.

(iii) Strength of informal violence controls. Where the exodus of legitimate economic opportunities from urban communities took with it many people committed to legal, nonviolent values, those people were no longer available for roles in preventing drug-related violence. They were not available, for example, as nonviolent role models for adolescents, as passers-by who might discourage a drug buyer or intervene in emerging violent events, or as concerned individuals who might inform parents if their children began drifting toward involvement in drug markets.

(iv) Social status and moral authority. During crack epidemics in some communities, successful young drug entrepreneurs either supplanted or intimidated neighborhood “old heads” – unofficial community leaders who upheld traditional values and exercised moral authority in the neighborhood. Where this occurred, it tended to weaken cultural restraints against violence in all contexts, including drug markets.

2.2.2 Encounters between people (Microsocial)

These are the characteristics of encounters between people. Examples include groups drinking in settings where violence is expected. Socially accepted arguments are started

or aggravated because the participants are under the influence of drug/alcohol. Disputes involving organizations, buyers, and sellers in illegal drug markets also occur.

In a variety of ways, alcohol and drugs modify encounters between people in ways that make these substances greater hazards for violence. In the case of alcohol, these hazards tend to be related to use, while for illegal psychoactive drugs they tend to be related to distribution and purchase.

(i) Alcohol use and sexual violence

Some therapists who treat violent sex offenders in Goldstein (1985:220) have reported that their patients tend to have both histories of alcohol abuse and high blood levels of testosterone. The frequent involvement of alcohol in acquaintance rapes suggests that social expectations may also be at work, that is, young men who expect to have sex after drinking may try to satisfy their expectations, sometimes forcibly if they encounter resistance.

(ii) Illegal drug markets

Illegal drug markets operate outside the world of contract law, courts and mediators for resolving disputes, and business customs that distinguish socially acceptable from unacceptable approaches to buying and selling. Illegal drug markets often develop substitute mechanisms that involve the threat or actual use of violence. Examples includes:

- Violence by drug distributors in the course of territorial disputes between rival organizations, threats of violence to make “staff” obey organizational rules, violent punishment of rule breakers to keep the threats credible, battles with police, and protection of sellers or drugs on the street.
- Violence between buyer and seller during a drug transaction, caused, for example, by attempted robbery of one or the other, failure to hand over drugs or money, or “ honest” misunderstandings of local rules of the game on the part of buyers and sellers.
- Violence involving people other than buyers and sellers who are found around drug markets, third parties such as innocent bystanders and people operating in related illegal markets for “ protection”, guns or prostitution.

Illegal drug markets may also serve as “magnets”. As such, they attract valuable drug and cash, weapons, and people who are accustomed to violence.

(iii) Obtaining drug purchase money

In some settings, the need for money to buy drugs also increases the chance of a violent encounter. A taxi driver carrying a passenger late at night, for example, is presumably at greater risk of being robbed if the passenger wants to buy drugs but lacks the cash to do so. While robbery is still a common way to obtain money to buy drugs, it has been replaced by drug selling in some large cities. Violence is related to the distribution, purchase, and use of illegal drugs in a wide variety of human interactions.

2.2.3 Psychosocial Links

Evidence from research conducted by Walters (2000:48) indicates that patterns of substance abuse and aggressive behavior reinforce each other. Patterns of aggressive behavior and substance abuse often become intertwined starting in childhood. Early childhood aggression is a predictor of later heavy drinking, and the combination is associated with an above –average risk of adult violent behavior, especially among those who also abuse other psychoactive drugs.

Research, Walters (2000: 49), suggests at least four possible explanations for the link between substance abuse and violent behavior in adolescents.

- i. First, adolescents may chronically use psychoactive substances to help them temporarily escape from such feelings of rage, guilt, worthlessness, or depression-emotions that often precede aggressive behavior.
- ii. Secondly, repeated family arguments over teenage substance abuse may eventually take on a violent character.
- iii. Thirdly, underlying family problems or socially expected responses may lead some adolescents to patterns of heavy drinking and fighting as ways to demonstrate their masculinity.
- iv. Lastly, boys who regularly observe older males fighting while drinking may learn to expect that violent behavior accompany alcohol use.

2.2.4 Neurobehavioral Explanation

According to Molina and Pelham (2003:57), there are several neurobehavioral links between violence and psychoactive substances:

- i. Expectant mothers' use of psychoactive substances during pregnancy adversely affects fetal development. The resultant damage causes learning and communication problems that, in turn, increase the risk of early grade school failure, a well-documented precursor of violent behavior.
- ii. Alcohol is the only psychoactive drug that in many individuals tends to increase aggressive behavior temporarily while it is taking effect. However, factors at other levels, behavior patterns when people are not drinking, the settings in which people drink, and local drinking customs, for example, influence the strength of this relationship.
- iii. Among alcohol abusers, those who also abuse other psychoactive substances, and who are diagnosed with antisocial personality disorder and whose parents have been diagnosed as alcohol abusers are at especially high risk of chronic violent behavior. Some researchers have suggested that a genetic process may contribute to this relatively rare pattern.

Marijuana and opiates temporarily inhibit violent behavior, but withdrawal from opiate addiction tends to exaggerate both aggressive and defensive response to provocations.

Drug-defined offenses are violations of laws prohibiting or regulating the possession, use, distribution, or manufacture of illegal drugs e.g. drug possession or use, marijuana cultivation, methamphetamine production, cocaine, or marijuana sales. Drug-related

offenses are offenses to which a drug's pharmacological effects contribute. They are also offenses motivated by the user's need for money to support continued use, as well as offenses connected to drug distribution itself e.g. stealing to get money to buy drugs, violence against rival drug dealers. A drug-using lifestyle is a lifestyle in which the likelihood and frequency of involvement in illegal activity are increased because drug users may not participate in the legitimate economy and are exposed to situations that encourage crime (e.g. opportunities to offend resulting from contacts with offenders and illegal markets and criminal skills learned from other offenders) (Walters, 2000:27).

Attempts to combat crime cannot be isolated from attempts to reduce the level of substance abuse. Research conducted by the Human Science Research Council (1996) indicated that there is a definite relationship between the level of drug/alcohol use and crime. A general rise and particularly in illicit drug use in South Africa, is predicted for the near future.

In South Africa, while there has been a moderate amount of research on the link between alcohol use and intentional injuries and homicide, there has been a paucity of research on the link between substance abuse and crime. Only one prison study was conducted. This study found that 46% of prisoners or parolees reported using drugs at the time, or just prior to the offense for which they were incarcerated (Parry, Pluddeman, Louw & Leggett, 2002: 45).

Allan, Roberts, Pienaar and Stein, (2001:145) argue that an incidence rate of substance abuse in South Africa is unacceptably high. Their research suggests a relationship between substance abuse and suicide. In their findings one hundred and four subjects (39%) had criminal convictions, the majority of which were committed while intoxicated.

Morojele and Brook (2005:140) found that cigarette smoking is socially acceptable in many countries. There is not much documented proof on the relationship between cigarettes smoking and crime, however in South Africa, Tobacco Control, Act 38 of 1993 prohibits the sale or consumption of tobacco products to persons under the age of 16.

Various substances, their effects and their relationship with crime will now be discussed. Knowing what the effects of these substances are essential for a better perspective on its role in crime causation. This knowledge will also help in efforts to try to curb the situation and find solutions.

2.3 ALCOHOL

2.3.1 Forms and Appearance

Alcoholic drinks come in many types and varieties and are made through fermentation, either through straight fermentation or by brewing. To make the drink stronger, the processes of fortification or complete distillation can be applied.

2.3.1.1 Brewed Beverages

One method of producing alcoholic drinks is brewing. Brewing is the process by which raw materials, made of starchy substances can be turned into alcohol. The raw material is

steeped in water, boiled, often with hops, and then fermented using yeast. This is the method used to produce the ever-popular beverage called 'beer'. Other names given to this drink are 'malt', 'wash', 'wort', and 'ale'.

- **Beer**

According to Shannon (2002:32), the term 'beer', 'ale', and 'lager' are often interchangeable, but their meanings are sometimes different. Beer was originally weaker than ale, and whereas ale was brewed using hops, beer was brewed unhopped. Many people use the term 'lager' to describe a drink lighter in colour and alcoholic content from beer, but the words actually refer to the method of brewing. Lager is bottom fermented, where the yeast sits at the bottom of the fermenting vat, and is given a long period of cold storage (lagering). Beer is top fermented. Stout is similar to modern ale, but is produced using some roasted barley or malt, giving it a darker colour.

Beer is usually served in specially made glasses. These hold exactly a pint or a half-pint of liquor, and are filled to the brim, ensuring that one gets a standard amount of drink. This is not quite so pleasant but is easier in clubs when one wants to dance holding the drink. Taking a pint of beer back to the table without spilling a drop becomes an increasingly difficult task for pub or store patrons, even with the handy ridge built into the beer glasses. For this reason, beer mats are provided (usually printed with a beer company logo) on the tables to mop up any spillage.

- **Wine**

Wine is the fermented juice of grapes and alcohol produced from the natural sugars in the grapes. The two grape varieties used, almost exclusively, are vitas and vinifern. Wine is traditionally produced in Mediterranean countries, as vineyards need warm climates. However, in recent decades there has been an explosion of new world wines coming from New Zealand, South Africa, Australia, and Chile, to name but a few. White wines are light yellow to gold coloured. Flat white wines include white burgundy, capri, and muscadet. Sparkling white wines include the famous champagne, from the champagne region in France. It is famous as a celebratory drink and is used in the formula one race where the winning three drivers spray each other with champagne. It is so heavily sparkling that opening champagne requires careful skills. The other types of wine include rose wine, and red wine. Other fermented drinks include mead, which is produced from fermenting the sugar naturally occurring in honey. Cider and “apfelwein” is produced from apple juice. Perry often associated with cider, is produced from pear juice (National Institute on Alcohol Abuse and Alcoholism, 2001:45).

2.3.1.2 Fortified Beverages

Fortification is the process by which fermented drinks have their alcohol content rose by adding a stronger form of alcohol produced by distilling. Fortified white wines include Muscat and Vermouth. Fortified red wines include the famous Porto, from Portugal. Sherry is another common fortified wine, being very popular with female alcoholics, as it apparently has the optimum strength for getting alcohol into the bloodstream in the fastest time (Dawson, 2000:637).

2.3.1.3 Distilled Beverages

According to Dawson (2000:636) distilled alcoholic drinks are stronger than ordinary fermented drinks. The alcoholic content is raised through the process of distilling. This is based upon the different boiling points of alcohol and water. If the fermented mixture is heated to a temperature between these points, the alcohol vaporizes while the water remains liquid. This alcohol vapour is re-condensed (converted from vapour to liquid again through cooling), leading to a liquid high in alcoholic strength.

Distilled liquor is usually made from natural sugars such as honey, ripe fruit, sugarcane, beetroot and milk, or a starchy substance, which can be easily converted to sugar. Because distilled drinks can be produced to higher strength drinks than purely fermented drinks and because much of the original flavours are removed from the drink during distillation, distilled liquor can be made from just about anything, and around the world different populations have made use of locally available products to make their drinks. Other historic distilled liquors include brandy and whiskey. Popular distilled drinks include the following:

- **Vodka**

Dawson (2000:639) maintains that Vodka is one of the most pure forms of distilled liquor, containing a high proportion of alcohol and virtually no other flavourings. The word originates from Russia, where vodka is usually made from potato. Gin is similar to vodka but is infused with more flavour.

- **Whisky**

The ancient drink whisky is another popular spirit. Scotch whisky is a kind of whisky, as are Sang Thip and Mekhong whisky. Bourbon is another variation, the main feature being the use of much corn as well as malt and rye being used to produce it (Spear, 2002:71).

- **Tequila**

Tequila is an increasingly popular drink of Spanish origin served in a strange way involving lemons and salt. Raki is a grape based spirit that comes from the Greek island of Crete. Absinthe is a legendary green spirit of very high alcohol percentage, made from wormwood and produces hallucinations (Spear, 2002:75).

2.3.1.4 Cocktails

Cocktails are basically drinks mixed together. There are many different types and amongst them are Madras, Green Death, Embolism and Dirty Piscitelli (Spear, 2002:77).

2.3.2 Method of Use

Many people prefer drinking alcohol but occasionally alcoholic liquor is put into food and eaten. Famous examples are 'brandy butter' (though many modern brandy butters only contain brandy flavouring), fruitcake with brandy or other liquors in it, and chocolate liquors. Alcoholic drinks such as wine and cider are also often used in cooking, but the alcoholic content is generally removed by heating. In Australia and New Zealand, Tim Tams, a kind of biscuit, which can sometimes contain alcohol, are served now and again (Spear, 2002: 79).

In South Africa, the consumption of alcohol beverages has a long history. Alcohol is used for different festivities and ritual ceremonies, including weddings, ceremonies held for the deceased, coming-of-age ceremonies for boys and girls, meetings of reconciliation, ceremonies for propitiation of ancestral spirits, and graduation ceremonies of diviners (Pelzer and Phaswana, 1998:04).

2.3.3 Tolerance Potential

According to Shannon (2002:25), alcohol consumption interferes with many bodily functions and affects behavior. However, after chronic alcohol consumption, the drinker often develops tolerance to at least some of alcohol's effects. Tolerance means the need for increasing the amount of alcohol in order to feel its effects or becoming accustomed to a particular dose of alcohol, and increasing the dose in order to obtain the desired effects. There are several types of tolerance that are produced by different mechanisms.

The National Institute on Alcohol Abuse and Alcoholism (2002:58) maintains that humans develop tolerance when their brain functions adapt to compensate for the disruption caused by alcohol in both their behavior and their bodily functions. This adaptation is called functional tolerance. Chronic heavy drinkers display functional tolerance when they show few obvious signs of intoxication even at high blood alcohol concentrations, which in others would be incapacitating or even fatal. Functional tolerance does not develop at the same time for all alcohol effects. Consequently, a person may be able to perform some tasks after consuming alcohol while being impaired

in performing others. Different types of functional tolerance and the factors influencing their development are described below.

2.3.3.1 Acute Tolerance

According to Shannon (2002:26), although tolerance to most alcohol effects develops over time and over several drinking sessions, it also has been observed within a single drinking session. This phenomenon is called acute tolerance. It means that alcohol-induced impairment is greater when measured soon after beginning alcohol consumption than when measured later in the drinking session, even in the blood alcohol concentration is the same at both times. Acute tolerance does not develop to all effects of alcohol but does develop to the feeling of intoxication experienced after alcohol consumption. This may prompt the drinker to consume more alcohol, which in turn can impair performances or bodily functions that do not develop acute tolerance.

2.3.3.2 Environmental-Dependence Tolerance

Shannon (2002:27) further argues that, the development of tolerance to alcohol effects over several drinking sessions is accelerated if alcohol is always administered in the same environment or is accompanied by the same cues. Environmental-dependence tolerance develops even in “social” drinkers in response to alcohol-associated cues.

2.3.3.3 Learned Tolerance

Practising a task while under the influence of alcohol also can accelerate the development of tolerance. This phenomenon is called behaviorally augmented (i.e. learned) tolerance.

Humans develop tolerance more rapidly and at lower doses if they practice a task while under the influence of alcohol (Shannon, 2002:29).

2.3.4 Habitual Potential

According to The National Institute on Alcohol Abuse and Alcoholism (2001:94), drug habituation (habit) is a condition resulting from the repeated consumption of a drug. Alcohol habituation can also be linked to alcohol dependence, also known as “alcoholism” which is a disease that includes four symptoms:

- Craving, a strong need or compulsion to drink.
- Loss of control, which is the inability to limit one’s drinking on any given occasion
- Physical dependence, which includes withdrawal symptoms such as nausea, sweating, anxiety that occur when alcohol use is stopped.
- Tolerance, which is the need to drink greater amounts of alcohol in order to “get high”.

2.3.5 Overdose Potential

A large dose of alcohol will cause overdose leading to loss of consciousness and possibly even death. For a non-tolerant person (someone not drinking regularly) about 30 units (a bottle of spirit) would end in a trip to hospital and could be fatal. If someone is drunk, the only thing that will help him or her to sober up is time (Parry, 2002:35).

2.3.6 Withdrawal Symptoms

Alcohol withdrawal symptoms commonly occur in people who stop drinking or markedly cut down their drinking after regular heavy use. Alcohol withdrawal can range from mild almost unnoticeable symptoms, to severe and life-threatening ones. According to Newcomb and Earlywine (2001:34), symptoms usually associated with alcohol withdrawal include: Increased heart rate, increased blood pressure, restlessness, anxiety, nausea and vomiting, headache and irritability.

More severe withdrawal symptoms include auditory, visual, or tactile hallucinations, delirium, seizures, and coma. Alcohol withdrawal symptoms vary in severity and duration, depending on the quantity of alcohol consumption, frequency and length of time one has been drinking.

2.3.7 Effects of Alcohol

Alcohol is particularly attractive to the youth, as consuming it at this age is seen as a sign of maturity or adulthood. Alcohol was found to be the primary substance abuse amongst students, regardless of age or level of substance involvement. Adolescents who develop alcohol problems generally begin drinking alcoholic beverages in the form of wine, beer or distilled spirits during their early or mid teen years. By their senior years of high school, more than 75% report having had at least one alcoholic drink during the previous years (Morojele and Parry, 2002:101).

Pagliario and Pagliario (1996:220) identify two major types of young alcoholics. The “benders” or “binge” drinkers, who drink heavily for a short period such as on weekends or after major school sporting events and, “daily or chronic” drinkers who drink heavily every day or whenever alcohol is available. Inappropriate alcohol use among adolescents has been associated with significant problems such as violence related injuries, expulsion from school, arrests from impaired drinking etc.

2.3.7.1 Long-Term Effects of Alcohol

Exposing the brain to alcohol during adolescence may interrupt key processes of brain development, possibly leading to mild cognitive impairment as well as to further escalation of drinking (Spear, 2002:71). Induced adolescent learning impairments could affect academic and occupational achievement. In one study, Brown (2000:164) evaluated short-term memory skills in alcohol dependent and non-dependent adolescents aged 15 to 16. The alcohol dependent youths had greater difficulty remembering words and simple geometric designs after a ten minutes interval. In addition, sophisticated imaging techniques revealed structural differences in the brains of adolescents who displayed alcohol induced intellectual and behavioral impairment. Specifically, the hippocampus, a part of the brain important for learning and memory, was smaller in alcohol-dependent adolescents. The long-term effects include loss of brain cells, liver failure, epilepsy, high blood pressure, stomach ailments and loss of appetite.

2.3.7.2 Short-Term Effects

In the short-term, alcohol suppresses the part of the brain that control judgment, resulting in a loss of inhibitions. It also affects physical co-ordination, causing blurred vision, slurred speech and loss of balance (Brown, 2000:180). Alcohol is a central nervous system depressant. It acts at many sites, including the reticular formation, spinal cord, cerebellum and cerebral cortex, and on many neurotransmitter systems. Alcohol is a very small molecule and is soluble in “lipid” and water solutions. Because of these properties, alcohol gets into the bloodstream very easily and also crosses the blood brain barrier. Some of the neurochemical effects of alcohol are: increased turnover of norepinephrine and dopamine and decreased transmission in acetylcholine systems. Other short-term effects are distorted vision, hearing loss, impaired judgment, bad breath and hangovers.

2.3.8 Alcohol and Crime

Alcohol used alone or in combination, dramatically increases the risk of violent behavior and contributes significantly to the prevalence of adolescent suicide, fighting and robbery. A consistent and positive relationship between the use of alcohol and violent crime involving aggressive behavior has been identified (Pagliaro and Pagliaro, 1996:206).

Zhang, Wieczorek and Welte (1997:1264), examined the nexus between alcohol and violent crime by specifying alcohol as a moderating variable that may interact with other major causes of violent crime. Four major causes of violent crimes at the individual level are identified, namely individual motives or attitudes, aggression and hostility,

impulsivity, and the loss of problem-solving abilities. Data indicate that the usual drinking pattern does not constitute an independent cause, but has significant interactions with two of the major causes: deviant attitudes, aggression and hostility.

Incidence rates of crime and alcohol abuse in South Africa are unacceptably high. Relationships are sought between crime, violent crime and suicide attempts on the one hand, and demographic and alcohol-related variables on the other. According to Parry (2005:426) one in two non-natural deaths in Cape Town in 2003 had alcohol levels greater than 0.05g/100ml. More than one in three patients seen at trauma units in Cape Town in 2001 had high alcohol levels. Alcohol had been linked to many other problems.

The commonly associated relationship between alcohol use and violent crimes can be explained, for the most part, by two mechanisms: pharmacological mechanism and social mechanism.

2.3.8.1 Pharmacological Mechanisms

According to Pagliaro and Pagliaro (1996:209), the first pharmacological mechanism involves the direct effect of alcohol as a sedative-hypnotic. As a sedative-hypnotic, alcohol depresses the central nervous system, decreasing social inhibitions and impairing cognitive processing. For example, aggressive and sexual behavior or thoughts about such behavior that have been suppressed because of acquiescence to social norms or concern for associated consequences, are released from conscious control, making them more likely to be acted on. Obviously, this pharmacological mechanism would

significantly interact with the personality of the user, assuming that two adolescents drank alcohol to the same level of intoxication. The disinhibitory effects would most likely result in an increased risk for violent behavior in the adolescent who had such a predisposition in comparison to the adolescent who did not.

The second suggested pharmacological mechanism involves an interaction between alcohol use and another variable, which also is related to the violent behavior. For example, assuming that the level of frustration is positively related to violent behavior, there may be situations in which the level of frustration in a particular situation is insufficient to lead to violent behavior. Similarly, a situation could exist in which the level of alcohol use was insufficient to lead to violent behavior. However, if risk factors, such as level of frustration and alcohol use are combined in a predisposed child or adolescent, then violent behavior is likely to occur because the threshold for such behavior is much more likely to be exceeded as a result of the interaction of these two variables (Morojele *et.al.* 2002:26).

2.3.8.2 Social Mechanisms

The second mechanism, the social mechanism, involves intervening psychological and sociological variables, including cognitive social learning variables. When drinking alcohol, children and adolescents anticipate certain effects from the alcohol and behave in a manner that they have learned is expected of them. For example, if men drink to feel more “strong”, “manly”, or “powerful ”, and if the social role expectation of being strong, manly, or powerful is to be more aggressive, then adolescents, particularly boys, will be

more likely, when drinking, to act in accordance with this expectation (Pagliaro and Pagliaro, 1996:211).

2.4. MARIJUANA

2.4.1. Forms and Appearance

2.4.1.1 Herbal

Herbal or vegetable marijuana is, by a small margin, the commonest form of the drug in use worldwide. This is prepared by drying and chopping the leaves of the marijuana plant into a coarse cut tobacco-like mixture. The finest quality herbal marijuana is produced by drying and chopping the flower, known as the bud, of the female marijuana plant. This preparation known on the streets contains the highest levels of tetrahydrocannabinol in herbal form but is rare and relatively expensive.

Most samples of herbal marijuana are greenish brown in colour, although on rare occasions samples are seen that are pale green or gold. Herbal marijuana can easily be mistaken for various forms of tobacco due to its similar appearance, and many parents and teachers have had the embarrassing experience of accusing a young person of illegal possession of marijuana only to find later that it was nothing of the sort. Some of the street names include grass, cannabis, puff blow etc. (Emmett and Nice, 1998:24).

2.4.1.2 Resin

The leaves and stems of both the male and female marijuana plants are covered in a coating of fine hairs. In bright sunlight, as the plant approaches maturity, each hair begins

to exude a sticky resinous sap from its end. These exudates are collected and then dried and compressed to produce the finest form of marijuana resin. Street names include pot, hash, gold etc. (Emmett & Nice, 1998:24).

2.4.1.3 Oil

Emmett and Nice (1998:25) further maintain that marijuana oil is produced by dissolving marijuana resin in a powerful commercial solvent, filtering out the fibre content and then evaporating off the solvent leaving behind viscous, heavy oil that contains a very high level of tetrahydrocannabinol. The oil varies in colour from dark green or dark brown to black and has a very powerful smell similar to rotting vegetation. Anyone who has smelled a rotting cabbage or a bag of brussel sprouts will have smelled something similar. This oil is either dribbled onto rolling cigarette tobacco or smeared with a matchstick onto the sides of commercially made cigarettes. It's street names includes harsh oil, diesel honey etc.

2.4.2 Methods of Use

Marijuana is most commonly smoked, with the lungs carrying the active ingredient, tetrahydrocannabinol, into the bloodstream. It can be smoked in many ways but whatever way is chosen, there are several practical problems for the user to overcome. First, herbal marijuana is a dry and short stranded product. Second, it burns at a very high temperature, much hotter than tobacco. Third, it contains much higher levels of tar.

The commonest method used to smoke cannabis is to roll it in a hand-rolled cigarette called a joint or a spliff or splith. If the smoker is using herbal cannabis then this will be rolled without the addition of tobacco, but if the resin is used then it crumbles. A traditional way of smoking cannabis using a water pipe has in recent years enjoyed a great revival. The hand crafted and decorative “hookah” pipe is still used, but more commonly a crude version called a “bhong” is constructed using a wide assortment of different watertight objects.

At its simplest, such a pipe will be constructed from a plastic drink bottle of around one litre size. A hole is pierced in the side of the bottle about half way up from the bottom and a tube is inserted at a downward angle until its end reaches close to the bottom. A waterproof seal is then made between the side of the bottle and the tube with chewing gum or something similar. This tube can be made from plastic, glass, wood, rubber or metal.

At the other end of the tube, a smoking bowl will be constructed using tin foil with holes punctured at the bottom and fixed to the tube end. A bottle top is often used, although more robust smoking bowls are often made from mechanic sockets that have had a hole drilled through the base. Water is poured into the bottle until the lower end of the tube is covered and the bhong is ready for use. The smoking bowl is filled with marijuana and is lit while the smoker inhales through the neck of the bottle. By doing so the smoker creates a depression over the water and smoke is drawn from the burning marijuana down the tube to bubble up through the water to the smoker’s mouth.

This is the basic design of the bong but there are many variations on this theme. There are bongs made from all sorts of bottles and containers, including brandy bottles, chemical resorts, ball valve floats, buckets and dustbins. Users often abandon Bongs when smoking is finished. It is not uncommon to find numbers of them in places where young people gather and they provide good evidence of the use of marijuana in that area (Emmett and Nice, 1998:33).

Another form of pipe used for the smoking of marijuana is the “toke” or “toke can”. These are becoming very popular with many young people as they take only a few seconds to prepare. The user takes an empty drink can and uses the thumb to make a depression in the side of the can near to the base. This depression is made in line with the ring pull opening and on the same side of the can. A few holes are punctured in the base of the depression and the pipe is complete. The user places a small quantity of herbal or resin marijuana in the depression and lights it while sucking at the ring pull opening. The body of the can being metal and large enough provides sufficient cooling for the smoke. When finished the can is simply thrown away and a new one made when required.

Another form of a marijuana pipe, known as a “lung”, has recently become popular among young people. A lung is manufactured from a small plastic drink bottle. The bottom is cut off and a small plastic bag is fixed over the bottom with sticky tape. A simple smoking bowl is constructed at the open top of the bottle with metal foil which has a number of holes punctured in it. Herbal or resin marijuana is added to the bowl and lit. The plastic bag is pumped up and down to draw the smoke down into the bottle and

bag. The smoking bowl is then removed and the user then pumps the plastic bag to drive the smoke back out of the bottle into the mouth. The lung may be passed round a group until all the smoke has been used up and the process repeated.

Another way of smoking marijuana is called “hot knifing”. In this method a knife is heated with a match or cigarette lighter until it is very hot and then pressed against some herbal marijuana or a piece of resin, which will immediately begin to smoke. The smoke is then collected with a cupped hand or using a funnel made from the top of a lemonade bottle and breathed in.

Sometimes the sleeve from a box of matches is used to collect the smoke, the matchbox sleeve is known as a “mouth organ”, and using it in this way is called “playing the mouth organ”. Another variation is to use two hot knives and to pick up a piece of marijuana resin between the blades, collecting the smoke as before. A small piece of resin is impaled on the end of a pin. Sometimes the pin at the back of a badge is used. The resin then is ignited with a match or lighter and the smoke allowed filling a glass, often a beer glass. When full, the glass is passed around a group with each member ‘drinking’ some of the smoke.

While smoking marijuana is by far the most popular method of using the drug, marijuana can be taken by mouth. Herbal or resinous marijuana can be eaten on its own but is more usually used as an ingredient in various forms of cooking. The drug can be introduced into all sorts of food items. Pies, stews, pizzas are very popular. Cakes containing the

drug and called “hash cakes” or “space cakes” are regular fare at certain parties. Many cases exist where young people are badly affected by marijuana taken inadvertently by eating food prepared by someone who sees the spiking of it as some sort of joke- one that could have disastrous consequences (Emmett & Nice, 1998:36).

2.4.3 Tolerance Potential

As with the majority of drugs, marijuana users can quickly develop a tolerance. The usual pattern is that they require larger doses to achieve the same effect. The pattern of tolerance is somewhat confused in new users by another of the drug’s characteristics. Tetrahydrocannabinol is very persistent and is absorbed by the fatty tissues around many of the body’s soft organs and by the brain. From there it leeches back out into the bloodstream over a long period. This steady leeching maintains a level of tetrahydrocannabinol in the bloodstream all the time and if further doses of the drug are then taken they ‘add on’ to the drug already there and the user appears to experience a sort of reverse tolerance with the full effects of the drug being reached with lower doses. This phase soon passes, and a bodily tolerance grows until a more normal pattern is reached with ever increasing doses required to achieve what the user is seeking (Fields, 2001:57).

2.4.4 Habitual Potential

When considering this aspect of any drug one needs to be clear as to what terms such ‘addiction’ and ‘habituation’ mean. A true addiction is normally taken to mean some form of chemical dependence on the substance being taken. The addicted person requires

further doses of the substance to stave off physical symptoms of withdrawal. Their bodies have adapted physically and require the substance to continue to operate.

Habituation, on the other hand, is more often a purely psychological problem. The user becomes dependent mentally on the substance. It can be likened to the habit of biting one's nails. The nail biter chews away out of boredom, to relieve stress or merely to derive comfort from it. Many users of marijuana claim that the drug is not addictive. Marijuana produces in many of its users a very powerful psychological habituation. This dependence is purely mental, and users become to rely on the drug to deal with the everyday processes of their lives (Field, 2001:59).

2.4.5 Overdose Potential

According to Emmett and Nice (1998:42), it is not possible to overdose fatally on marijuana. It is possible to take such a high dose that the user will fall into a stupor during which they may be at risk of being sick and inhaling their own vomit or being at risk of accidents.

2.4.6 Withdrawal Symptoms

There are very few purely physical symptoms from the cessation of use of marijuana, most of which are psychological. The symptoms that any particular user will experience are dependent upon the amount that they have been using and the period over which they have been using it. A person who has only used it on an occasional basis or over a short period of time, will experience very little in the way of withdrawal symptoms but as the

amount used increases or the period of use become extended, then some users will experience great difficulty in giving up. Some will experience problems with sleep, becoming restless and suffering from insomnia. Sleep deprivation can be difficult to handle and the temptation to fall back into use of the drug will be very powerful. Others may suffer panic attacks and the feeling that they are unable to cope with the ordinary trials of day-to-day life (Wilson, 2005:9).

2.4.7 Effects of Marijuana

According to Fields (2001:93), the effects of marijuana depend on the potency of the method of use. An experienced or irregular user can expect one marijuana cigarette of medium strength to produce effects that will last for between 2 and 4 hours with a tapering off of the effects after that.

Most users will experience a feeling of bodily warmth, which is purely physical to the drug. The small blood vessels close to the surface of the skin dilate and suffuse with blood. This gives the skin a flushed appearance and makes it warm to the touch. It also leads to the characteristic of marijuana user's blood shot eyes known as 'marijuana red eye'.

Users often report a feeling of relaxation, happiness and congeniality, with them taking a great deal of pleasure from the company of the people around them. If these people are also using marijuana, then there is the potential for very pleasurable experiences. Many

marijuana users make use of the drug in order to give themselves confidence in social situations and they find that it helps them to mix with others and to make friends.

Marijuana users often become very talkative and report that the drug has so opened their minds and given them such insights that they are able to have wonderful conversations with other marijuana users about all sorts of subjects including all of the big questions of life, love, religion, death and so on. The objective experience of this is very different.

In some users cannabis in low doses apparently temporarily increases the powers of concentration and many young people use it as an aid to studying and revision. They feel that the drug enables them to study for longer periods without fatigue. Most users will lose their inhibitions and do things that they would never dream of doing while sober. In some users marijuana raises their sexual awareness and this together with the loss of inhibitions may lead them to have unprotected sex, possibly leading to pregnancy or the transmission of various diseases (Paterline, 2003:30).

2.4.7.1 Long-Term Effects

Trying to make sense of all the available information about the long-term effects of regular marijuana use is very difficult. The current state of knowledge can be likened to the position society was in some years ago with the knowledge of health problems associated with smoking. Research revealed some very serious problems, such as lung cancer and heart disease, but as times went on further research revealed more.

- **Immune System Effects**

Research suggests that marijuana, particularly when used regularly, tends to suppress the body's immune response and ability to combat infections. Marijuana temporarily arrests the maturation developing t-cells, which protects the body from colds and other bacterial infections. This increases the chances of illness due to either bacteria or viruses. The most prominent indication of this effect is the higher incidence of bronchial infections, pneumonia, and coughing noted among chronic, heavy marijuana use.

- **Reproductive System Effects**

Chronic use of marijuana decreases sperm motility and serum testosterone in men and interferes with the menstrual cycle in women, thus affecting fertility. Research indicates that in some individuals, the reduction in testosterone levels becomes permanent and so low that problems are then experienced in achieving or maintaining an erection and performing the act of sexual intercourse (Fields, 2001:95).

- **Cancer**

Marijuana certainly causes cancer. The smoke produced by burning contains about 50% more known carcinogens than the same volume of cigarette tobacco smoke. This is not as straightforward as it seems at first glance. Most people, who smoke only tobacco, consume much greater amounts of their choice drug than do people whose choice is marijuana. There are differences in the way users smoke marijuana that are important. Most users of marijuana will inhale very much more deeply than do most tobacco smokers and will, in order to extract the maximum effect from it, retain marijuana smoke

in their lungs for much longer. This means that the smoke will be in contact with the membranes of the throat and lungs for a greater period of time than is usual with cigarette smokers. There are growing numbers of documented cases of throat, mouth and lung cancers that appear to be directly connected to the smoking of marijuana (Soo, Seung, Chung, 2006:270).

2.4.7.2 Short-Term Effects

According to Paterline (2003:42), at low and infrequent doses, the effects of marijuana are fairly mild and many users report few if any at all. Some users will suffer from dryness of the mouth and throat if the cannabis has been smoked and some will suffer bouts of nausea and dizziness.

- **Effect of Marijuana Use on Learning and Social Behavior**

Research clearly demonstrates that marijuana has the potential to cause problems in daily life or make a person's problems worse. Depression, anxiety, and personality disturbances have been associated with chronic marijuana use. Because marijuana compromises the ability to learn and remember information, the more a person uses marijuana the more he or she is likely to fall behind in accumulating intellectual, job or social skills. Moreover, research has shown that marijuana's adverse impact on memory and learning can last for days or weeks after the acute effects of the drug wear off (Lynskey and Hall, 2000:120)

Students who smoke marijuana get lower grades and are less likely to graduate from high school, compared with their non-smoking peers. The effects of marijuana can interfere with learning by impairing thinking, reading comprehension, verbal and mathematical skills. Driving experiments show that marijuana affects a wide range of skills needed for safe driving.

- **Effects of Marijuana on Health (brain, heart, lungs)**

Scientists have learned a great deal about how tetrahydrocannabinol acts in the brain to produce its many effects. When someone smokes marijuana, tetrahydrocannabinol passes from the lungs into the bloodstream, which carries the chemical to organs throughout the body including the brain.

In the brain, tetrahydrocannabinol connects to specific sites called cannabinoid receptors on nerve cells and influence the activity of those cells. Some brain areas have many cannabinoid receptors and are found in the parts of the brain that influence pleasure memory, thought, concentration, sensory, and time perception, and coordinated movement. The short-term effects of marijuana can include problems with distorted perception, difficulty in thinking and solving problems, and loss of coordination.

Studies indicate that a user's risk of heart attack more than quadruples in the first hour after smoking marijuana. The researchers suggest that such an effect might occur from marijuana's effects on blood pressure and heart rate and reduced oxygen-carrying capacity of blood.

Scientists believe that marijuana can be especially harmful to the lungs because users often inhale the unfiltered smoke deeply and hold it in their lungs as long as possible. Therefore, the smoke is in contact with lung tissues for long periods of time, which irritates the lungs and damages the way they work (Fried & Smith, 2001:10).

2.4.8 Marijuana and Crime

A unique problem exists when trying to consider marijuana's effect on crime. Some studies, Walters (2000: 56), as mentioned earlier have shown a correlation between marijuana use and other minor criminal behavior. Literature on marijuana and driving contains several references to the role of marijuana in the traffic violations, accidents and fatalities.

According to the National Institute on Drug Abuse (2005:66) marijuana affects many skills required for safe driving: alertness, the ability to concentrate, coordination, and reaction time. Marijuana use can make it difficult to judge distances and react to signals and sounds on the road. In 1996 the Human Science Research Council found a correlation between crime and marijuana. The use of marijuana tended to precede the use of alcohol, which in turn led to illicit drug taking and concurrently led to involvement in criminal activities. Property crimes were associated with smoking of marijuana in groups. Marijuana use seemed particularly well entrenched among offenders in the Western Cape, Eastern Cape, Kwa Zulu Natal and Mpumalanga. National Institute on Drug Abuse (2005:66) further states that marijuana is the illicit drug that is most frequently used by

teenagers, and more than half of high school seniors' reports that they have used marijuana at least once.

2.5. COCAINE

2.5.1 Forms and Appearance

Cocaine is a central nervous system stimulant that has gained great popularity in a variety of drug forms. Cocaine is a pure white crystalline powder. The crystals are very small and even and sparkle when exposed to the light. It is usually about 85% pure at the end of the manufacturing process and it is in this form that it enters different parts of the world. There are several street names for cocaine: coke, snow, bernice, big c, bombita etc. (Wilson, 2005:8).

2.5.2 Methods of Use

Most users of cocaine in its powder form use the drug by the practice known as snorting, involving the sniffing of the powder sharply into the nose and allowing the drug to be absorbed into the blood stream through the membranes inside the nose. The drug is placed on a smooth hard surface such as a mirror or a china plate and then arranged into a thin line by the use of a razor blade or a plastic credit card. The use of such a tool is a very efficient way of dividing an amount of the drug into equal parts so that more than one person can share it. To divide a sample of powder into equal parts without scales is very difficult, but a high level of accuracy can be obtained by the use of such a device to create lines of equal thickness and length.

Having arranged the powder into a line, the user then places a small tube into one nostril and closes off the other nostril with a finger. They then place the end of the tube at one end of the powder line and sniff sharply, thus drawing the powder into the nose. As they do so they move the tube along the line sniffing up the powder. The tube may be constructed from glass, plastic or metal. In some circles, there is a fashion for snorting cocaine from a small specially shaped spoon. This spoon is often very ornate and may well be made from solid silver, the bowl of which is set at right angles to the handle. It is filled with cocaine powder and held up to one nostril for snorting. Some users rub the drug into their gums with a finger. The cocaine is rapidly absorbed into the bloodstream and for pure efficiency this method allows more of the drug to reach the brain than snorting it (Emmett & Nice, 1998:77).

Occasionally, cocaine is used by dissolving it into a drink or placing it in cold food. This is not a particularly efficient way of getting the drugs into the bloodstream and has few followers. In recent years, there has been a significant increase in the number of users who inject cocaine. This is done either by injecting into a vein or by a process known as 'skin popping', where a small amount of liquid is injected into the fat layer just below the surface of the skin. Injecting into the veins is the method that provides the most rapid 'hit' as the drug reaches the brain in high concentrations within a few seconds of injection (Fields, 2001:83).

2.5.3 Tolerance Potential

Some of the tolerance will develop with continued use of cocaine. Regular use of the drug can lead to a point where the effects or their duration becoming noticeably reduced and the user have to increase the amount of each dose or the frequency.

Very few users become physically dependent upon cocaine. The major risk lies in acquiring a psychological dependence upon it. This dependence can be very deep seated and difficult to treat (Emmett & Nice, 1998:80).

2.5.4 Habitual Potential

The short duration of effect, that is a feature of this drug, encourages the user to keep using it. If the user wishes to be under the influence of cocaine for the duration of a party or other social event, they will need to take several doses spaced at regular intervals. The adverse effects of withdrawal are thus put off, but as with all such reactions, they cannot be put off indefinitely and the crash, when it finally arrives, will be even greater. The feeling of weakness, anxiety and lack of confidence are very powerful and can be extremely unpleasant providing a further impetus to the desire to keep on using the drug (Wilson, 2005:50).

2.5.5 Overdose Potential

Wilson (2005:65) maintains that overdoses can occur with cocaine at relatively low levels. Because of the uncertainty that exists over the strength of any particular sample of street cocaine it is very easy to take too much. The precise level of an overdose for any

one person cannot be predicted with any accuracy and regular users should always be aware of the risks that they run. The overdose of cocaine can lead to body temperature rising to dangerous levels.

2.5.6 Withdrawal Symptoms

Withdrawal effects occur when a person dependent on a drug stops using it or significantly cuts down the amount they are using. Paterline (2003:55) states that cocaine withdrawal generally occurs in three phases.

2.5.6.1 'Crash'

This describes symptoms experienced immediately after the person stops using cocaine usually in the first two to four days. The effects include: agitation intense craving for the drug, depression and extreme fatigue.

2.5.6.2 Long Term Withdrawal Symptoms

These symptoms can last up to ten weeks and are characterized by: lack of energy, angry outbursts and anxiety

2.5.6.3 Extinction

This can last indefinitely and includes symptoms of episodic cravings for cocaine, usually in response to conditioned cues. These cravings may surface months or years after the person has stopped using drug. Other withdrawal effects that may be experienced include: Lack of motivation, nausea, shaking and muscle pains (Fields, 2001:84).

2.5.7 Effects of Cocaine

The hit provided by cocaine is felt very rapidly. The brain takes up the drug very easily and the user will begin to feel the effects of its use within a few seconds of taking it. The effects will be very short lived however and dependent upon how much of the drug was used and the previous experience of the user. They will also vary from a few minutes up to two or three hours at the most (Emmett & Nice, 1998:78).

Most users report powerful feelings of euphoria with overpowering feelings of well being, energy, and strength. They will experience great clarity of mind and feel that they have been given deep insight into their lives. The drug will give users feelings of confidence and freedom from anxiety and stress. Cocaine users often become very excitable and talkative and will feel unable to keep still, wanting to be actively involved with other people. In many users, the drug increases sexual appetite and desires and they may well become engaged in episodes of casual sex with other users who have been similarly affected (Bhana, Parry, Pluddemann, Morojele, & Flisher, 2002:543).

2.5.7.1 Long-Term Effects

The saying 'what goes up must come down' is also true to cocaine users. Many users of cocaine pay for the energy and feelings of well being that it gives by equally powerful feelings of lethargy and depression. The user may well become very agitated and panicky and feel threatened by those around them. If the user has been taking very high doses of the drug, the coming down period can lead to very bizarre and often violent behavior.

Prolonged or heavy use of cocaine can lead to a loss of body condition and substantial weight loss. Some high dose users experience severe disruptions of their normal sleep patterns and may suffer from chronic insomnia. Male users may become impotent and incapable of achieving or maintaining an erection. Some long-term heavy users will become extremely paranoid and may even exhibit symptoms of being clinically psychotic (Fields, 2001:84).

The practice of snorting cocaine powder into the nose can lead to real problems with the membranes and lining of the nasal passages. One of the immediate effects of cocaine is to cause a constriction of the blood vessel that it enters. This may lead, especially in the case of the minute blood vessels such as are found in the nose, to them closing down completely. This shutting down of the blood vessels leads to the tissue that they feed becoming starved of the blood supply necessary to keep them alive. The tissues begin to die, and cannot be replaced by normal processes at a fast enough rate, to keep up with continued use of the drug. The membranes often perforate causing ulcers to form within the nasal passages and it is not uncommon for the septum, the membrane that separates the right and the left passages, to perforate completely. Infections within these nasal ulcers are very common and the user may require a great deal of medical treatment to deal with the damage (Emmett & Nice, 1998:79).

Injection of cocaine can also cause physical problems for the user. The drug causes constriction of the veins into which it is injected. The intravenous injector runs real risk of causing those veins to collapse and block. Such blockage can lead to the blood supply

being cut off to tissues normally fed by the vein which can lead to disorders such as gangrene, which if left untreated, can cause septicaemia, the loss of limbs and even death. People who are sharing needles and syringes with other users, who are infected, run the very real risk of acquiring the same infections. Diseases such as HIV, septicaemia and hepatitis are regularly passed from one person to another by such sharing (Paterline, 2003:66).

2.5.7.2 Short-Term Effects

Cocaine use has very serious effects on the nervous system. A dose of between 25 to 150 mg of cocaine is taken when it is inhaled. Within a few seconds to a few minutes after it is taken, cocaine can cause a feeling of euphoria, excitement, reduced hunger and feeling of strength. After this 'high', which lasts about one hour, users may "crash" into a period of depression. Various doses of cocaine can also produce neurological and behavioral problems such as dizziness, headache, insomnia and anxiety. Cocaine can cause large increase in blood pressure that may result in bleeding within the brain. Other short-term effects include: increased heart rate, dry mouth, constricted peripheral blood vessels, and extreme mental alertness (Fields, 2001:84).

2.5.8 Cocaine and Crime

There is widespread belief that in general and crack cocaine in particular "causes crime to go up at a tremendously increased rate" (Walters, 2000:30). Since 1985 researchers and others, have increasingly recognized Goldstein's framework as helpful in understanding the nature of drug/crime associations. The Goldstein framework sets out 3 principal types

of drug-related crime: systemic crime, psychopharmacologically driven crime, and economically compulsive crime. Although this framework was developed with violent crime in mind, its economic-compulsive prong is useful and relevant in considering nonviolent drug-related crime as well (Goldstein, 1985:219).

2.5.8.1 Systemic Crime

Systemic crime arises out of the system of drug distribution. It includes; disputes over territory between rival drug dealers, assaults and homicides committed within dealing hierarchies as means of enforcing normative codes, robberies of drug dealers and the usually violent retaliation by the dealers or their bosses, elimination of informers, disputes over drugs and/ or drug paraphernalia, punishment for selling adulterated or phony drugs, punishment for failing to pay one's debts, and robbery violence related to the social ecology of coping areas. Systemic violence has been referred to as a means to achieve "economic regulation and control" in an illicit atmosphere (Goldstein, 1985:220).

Many retail powder-cocaine distributors also distribute cocaine. Thus, pulling apart the systemic crime associated with cocaine versus powder-cocaine is difficult, if not impossible. Goldstein (1985:222), states "It is the frequency of selling cocaine products, not just selling in its smokeable form that seems to best explain violence in (cocaine) selling".

The primary association between cocaine and violence is systematic. It is the violence associated with the black market and distribution. Factors such as "volatile and jittery"

nature of the early cocaine market, its tendency to attract younger, presumably more crime-prone sellers, and later attempts by organized dealer groups to exert control, all led to an atmosphere in which participants in the cocaine trade were apt to “use violence to maintain discipline, resolve disputes, and enforce control” (Goldstein, 1985:222).

Research noted that any increased violence in the crack market was due to two factors: First, cocaine selling was concentrated in neighborhoods where social controls had been weakened by intensified social and economic dislocations in the decade preceding the emergence of cocaine. Second, the rapid development of new drug-selling groups. Following the introduction of cocaine brought with it competition. Accordingly, unstable cocaine markets were more likely to be characterized by violence within new selling groups than more established drug markets and distribution systems.

2.5.8.2 Psychopharmacologically Driven Crime

According to Goldstein (1985:227), psychopharmacologically driven crime occurs when “individuals, as a result of short-or long-term ingestion of specific substance, become excitable, and/ or irrational and exhibit violent behavior”. In short, use of the drug directly affects behavior, one consequence of which is criminal conduct.

Goldstein (1985:230) notes that drugs may also have a psychopharmacological effect if they are used to boost courage to commit crimes, either because they affect the brain in this manner directly or because the user expects the drugs to have this effect and, through a process of “self-fulfilling prophecy”, they do. In addition, psychopharmacologically

driven violence may stem from drug use by the victim as well as the perpetrator. In other words, “drug use may contribute to a person behaving violently or it may alter a person’s behavior in such a manner as to bring about that person’s violent victimization”.

2.5.8.3 Economically Compulsive Crime

Goldstein (1985:236) argues that economically compulsive crime is committed by persons who are financially driven to the criminal activity by financial needs brought about by drug consumption, for example robbery that is committed by drug users “in order to support costly drug use”. Economically compulsive actors are not primarily motivated by impulses to act out violently. Rather, their primary motivation is to obtain money to purchase drugs.

2.6 SUMMARY

The relationship between crime and the use of alcohol and other drugs has received a great deal of attention in previous research. Studies have generally revealed a positive association between criminal behavior and substance abuse. According to Walters (2000: 56), drugs are related to crime in multiple ways. Most directly, it is a crime to use, possess, manufacture, or contribute drugs classified as having a potential for abuse. Drugs are also related to crime through the effects they have on the user’s behavior and by generating violence and other illegal activity in connection with drug trafficking. The relationship between illegal drug market activity and lethal violence are entwined with social and economic processes in the community.

Incidence rates of crime and alcohol abuse in South Africa are unacceptably high. Relationships are sought between crime, violent crime and suicide attempts on the one hand, and demographic and alcohol-related variables on the other. The commonly associated relationship between alcohol use and violent crimes can be explained, for the most part, by two mechanisms namely psychopharmacological and social mechanisms. In social mechanisms, when drinking alcohol, children and adolescents anticipate certain effects from the alcohol and behave in a manner that they have learned is expected of them.

Exposing the brain to alcohol during adolescence may interrupt key processes of brain development, possibly leading to mild cognitive impairment as well as to further escalation of drinking. In the short-term, alcohol suppresses that part of the brain that control judgment, resulting in a loss of inhibitions. It also affects physical co-ordination, causing blurred vision, slurred speech and loss of balance.

The use of marijuana tends to precede the use of alcohol, which in turn leads to illicit drug taking and concurrently leading to involvement in criminal activities. Property crimes are, in most cases, associated with smoking of marijuana in groups. Marijuana is the illicit drug that is most frequently used by teenagers, and more than half of high school seniors' reports that they have used marijuana at least once. Marijuana's form of appearance includes herbal, resin and oil. Drying and chopping the leaves of the marijuana plant into a coarse cut tobacco-like mixture produce herbal marijuana. Marijuana oil is produced by dissolving marijuana resin in a powerful commercial

solvent, filtering out the fibre content and then evaporating off the solvent, leaving behind viscous, heavy oil that contains a very high level of tetrahydrocannabinol.

Marijuana is most commonly smoked by using “token can”, “bhong” and “lung”. The effects includes feelings of relaxation, happiness etc. There are also adverse effects on learning and social behavior. Students who smoke marijuana get lower grades and are less likely to graduate from high school, compared with their nonsmoking peers. The effects of marijuana can interfere with learning by impairing thinking, reading comprehension, verbal and mathematical skills. Driving experiments show that marijuana affects a wide range of skills needed for safe driving. As with the majority of drugs, marijuana users can quickly develop a tolerance. It is not though possible to overdose fatally on marijuana. There are very few purely physical symptoms from the cessation of use of marijuana, most of which are psychological

According to Walters (2000:30), there is widespread belief that in general, but crack cocaine in particular, “causes crime to go up at a tremendously increased rate”. Goldstein’s framework is helpful in understanding the nature of drug/ crime associations. The Goldstein framework sets out 3 principal types of drug-related crime: systemic crime, psychopharmacologically driven crime, and economically compulsive crime. Although this framework was developed with violent crime in mind, its economic-compulsive prong is useful and relevant in considering nonviolent drug-related crime as well.

CHAPTER 3

FACTORS CONTRIBUTING TOWARDS SUBSTANCE ABUSE AMONGST ADOLESCENTS

3.1 INTRODUCTION

The previous chapter examined the incidence and effects of substance abuse and its relation to crime, the different types of substances, methods of use, effects, their habit and tolerance potential. This chapter presents an overview of the factors contributing towards substance abuse amongst adolescents.

The first section outlines the social and community factors associated with substance abuse. The second section highlights the family factors causing adolescents' substance abuse. The last section contains the psychological factors related to substance abuse amongst adolescents.

3.2 SOCIAL AND COMMUNITY FACTORS ASSOCIATED WITH SUBSTANCE ABUSE AMONGST ADOLESCENTS

3.2.1 Availability of Drugs

Availability means that the drug must be obtainable within the community where the adolescents live. Drugs are most often acquired from adults and peers in the immediate social environment.

3.2.2 Community Factors in Availability

Specific psychoactive drugs are more available in some communities than in others. Alcohol, tobacco and marijuana are available, to some degree, in virtually every American Community and worldwide. The quality, cost, and ease of availability, however, may vary widely. Other drugs, including cocaine, crack, and heroin, are available in some communities and unavailable in others. Obviously an adolescent must have access to a drug before becoming a user of it. The more available the drug is, the easier it is for an adolescent to become a user (Ray and Ksir, 2002:03).

3.2.3 Social Factors in Availability

Gullotta, Adams, & Montemayor (1995:36) argue that popular media mythology depicts the drug pusher hanging around the schoolyard, trying to entice schoolchildren into trying his or her illicit wares. Real drug dealers, of course, do not behave this way. Most have a ready market for their drugs and do not need to develop new clientele, especially among schoolchildren who have too little disposable income to be an attractive market. Instead of the pusher, it is usually a friend, older sibling, or parent who introduces adolescents to drug use. Numerous studies shows that most illicit drug users received their first dose as a gift from a close friend. As they continue to use, their earliest purchases are likely to be from friends who sell the drug to them at little or no profit. Eventually, they learn where and who the drug dealers are, and this, too, they learn from their peers. Parents can also be a source of drugs for adolescents. Research by Gullotta *et.al.* (1995:37) indicated that parents were the most commonly reported source of alcohol for teenagers. Often parents are not aware that their children are secretly accessing their stock of alcohol or drugs.

3.2.4 Peer Factors and Learning Functionality of Drug Use

As social beings, adolescents are heavily influenced by values, beliefs, and social norms acquired through relationships with others. Adults and the peer group play an important role in teaching adolescents to use drugs. Popular conceptions of peer pressure to use drugs imply direct, coercive ploys designed to force adolescents to comply with group norms. In most cases, however, peer pressure to use drugs appears to be a subtle, indirect process of influence. Peer groups influence the social meaning of drug use by associating it with images of social recognition, independence, maturity, fun, and a variety of desirable outcomes. Thus, drug use often occurs in peer groups because adolescents reinforce each other's beliefs in these images. Peer mutual reinforcement of beliefs regarding the payoffs for drug use provides a powerful social basis for drug use (Ray and Ksir, 2002:18).

3.2.5 Lower Social Barriers

Many societies set restraints in the path of becoming a user of illicit drugs. Far more important than the external barriers placed in the path of availability are those internal restraints that society seeks to ingrain in each citizen. In order to become a drug user, an adolescent must overcome these internalized restraints to some degree. Barriers that are internalized often become situational as adolescents discover social and physical environments that are supportive of drug use (Gullotta *et.al.* 1995:40).

3.2.5.1 Community Factors that Neutralize Restraints

In every society the use of certain drugs is accepted as normative but the use of other drugs is taboo. Norms also dictate acceptable situations, purpose, and participants. The news media play an important role in shaping youths' ideas about drugs by both establishing restraints and neutralizing them.

- **School**

According to Fields (2001:46), the school environment plays a major role in the process of developing adolescent drug use. Schools that are rigid and authoritarian in their disciplinary policies tend to promote disrespect for authority. When students are subject to rules that exist purely by the official order of some authority figure, without need for any rational basis, can doubt the rationality of all society's rules including those regarding drugs. The negative attitudes fostered by authoritarian school systems make students more susceptible to drug use.

According to Clintock (2003:10), one of the wishes parents have about their children is achievement in school. The academic achievement of a child is regarded as a determining factor for the child's success. Adolescents, who fail more than once at school, have a tendency of regarding themselves as outcasts. Drug abuse may occur when there is academic failure. Frequently, those adolescents fail to develop the skills necessary to learn, integrate concepts and to succeed in school.

According to Fields (2001:39), many adolescents have learning disabilities, emotional problems, and attention-deficit disorders. Parents often deny these emotional and learning disabilities until the child is much older. The school system may also fail to adequately address these problems, resulting in education failure. Failure at school causes children to disregard school as a viable option for success in the real world. Substance abuse is often the choice for these young people. Discouraged by their failure in school, the additional shame of being labeled poor learners (i.e. stupid) leads to rebellious behavior and substance abuse. Lack of church involvement also appears to be a factor in the initiation of drug use. The greater the regularity of church attendance, the lower the use of drugs (Fields, 2001:40).

3.2.5.2 The Peer Factor that Neutralize Restraints

The peer group is a powerful influence promoting adolescent drug use. The importance of peer pressure urging the adolescent to use drugs may well have been generally over estimated. Drug use may be a condition for acceptance as a member of some peer groups. Adolescents learn from these associations that much of what school and media have taught the adolescent about drugs is false. The drug-using peer group teaches the adolescent that drug users as a group are no more sick or evil or weak or dependent than the rest of their peers. Perceived drug use by peers may be as important as actual peer drug use. Adolescents who believe that drug use is common among their peer group are likely to accept the idea that drug use is normative behavior (Clintock, 2003:55).

- **Functions of the Peer Group**

Gouws and Kruger (1994:120) point out that the functions of the peer group are very distinguishable. These include the following:

Through the peer group, the adolescent realizes the gradual attainment of independence or emancipation from parents and are forced to stand on their own feet and make own decisions. They also begin to share their own feelings and thoughts with their peers, more than with their parents.

Secondly the peer group gives the adolescent an opportunity to practice social skills and to communicate with members of the opposite sex. It further serves to meet the young person's needs for friendship. Because of fear of loneliness, adolescents view acceptance by the peer group as highly important.

Levant (1998:13) states that clinically defined, peer pressure refers to influence from others who are about the same age. He adds that as children move towards their teen years, fitting in becomes a dominant influence in their lives. He further explains that peer pressure can be divided into four categories, and all of them can have powerful influence on an adolescent.

Friendly pressure refers to a friendly offer to try something. This can range from anything from cigarettes to alcohol, for example: "would you like to try some?" **Teasing pressure** refers to strong pressure in which people tease young people to try a drug, for example: "Come on do not be a fool try it." **Indirect or tempting pressure** refers to a pressure to use drugs without direct offer. **Heavy pressure** refers to the strongest

pressure used to influence a young person to do something, for example: “I won’t be your friend if you don’t”.

3.2.6 Influences of Culture, Economics, and Modern Society

Societal norms and expectations are another set of forces that influence behavior. Factors such as the youth subculture, modeling, advertising, economics, and advanced technology in the society all influence decisions about substance abuse (Pinger, Payne, Hahn, & Hahn, 1995:32).

3.2.6.1 Youth Subculture

This subculture has its own expectations, roles, and standards, as well as its own language, dress codes, and behaviors. Although substance abuse is not limited to a single age group, prevalence rates are high among adolescents and youth adults. Perhaps young people, as members of this group, believe that they too must experiment with drugs. One attempt to explain the processes that occur during the development of one’s final status as a drug user centers on the gateway drug theory. A gateway drug is the first drug taken as a result of one’s choice to experiment with a mind-altering drug. This first experiment may or may not foster further experimentation or transition to regular drug use, abuse and dependence. Almost any drug can serve as a gateway drug for at least some portion of the population. The abuses of drugs that do occur in the youth subculture are of concern because patterns are established that carry into later life. It is, in fact, during this period that experimentation with gateway drugs begins, leading, perhaps, to the abuse of illicit drugs later in life (Pinger *et.al.* 1995:36).

3.2.6.2 Modeling and Advertising

According to Pinger *et.al.* (1995:34) the influence that others have on us by example of their own behavior is referred to as modeling. Modeling within the family or peer group plays an important role in fostering substance abuse among adolescents. Children who observe their parents drinking or taking other drugs are given a message that this behavior is normal and approved. Models of behavior for adolescents are not restricted to the immediate family and friends. Movie stars, musicians, and professional athletes are highly visible models.

Media advertising exerts a powerful influence on people of all ages but particularly on the young. Images of rich and attractive people on television and in magazines are designed to alter the viewer's behavior by suggesting a different set of norms than those that are actually in place. The marketing of tobacco and alcohol products is perhaps the best example of the use of modeling in advertising. Rich and powerful people are depicted enjoying industry products in pleasant surroundings that some viewers can only hope to experience. Well-known celebrities participate in concert or athletic events sponsored by the alcohol and tobacco industries. Company logos are seen on every item that appears on television, including the clothing and equipment of the participants, scoreboards and racecars. A high proportion of inner-city billboards advertise alcohol or cigarettes (Pinger *et.al* 1995:35).

3.2.6.3 Economics

Today many countries are facing declining employment. Many families are experiencing a loss of income, and for some, this leads to marital instability. Drug abuse and dealing are all too common responses to harsh conditions of economic deprivation, for example, the problem of a teenager who has been kicked out of home and onto the street to survive. Suppose further that this person had several brothers or children who needed support. This teenager might be tempted to deal in drugs to buy food. The teenager soon becomes accustomed to a lifestyle in which there is more money than was ever expected. This scenario illustrates how economic deprivation can influence substance abuse (Pinger *et.al.* 1995:35).

On the other hand, wealth can foster thrill seeking that may include drug experimentation. High school teachers report that some of their students routinely carry more money than is necessary for “everyday expenses”. This behavior is evidence that some of the youth have the means to purchase drugs. The presence of drugs in this atmosphere represents an enticing and dangerous situation in which drug experimentation and abuse can easily occur (Pinger *et.al.* 1995:36).

3.2.6.4 Modern Society

Certain aspects of our contemporary society make drug taking easier and more socially acceptable than in the past. Two such aspects are the concept of self-care and the reliance on technology.

- Self-Care

A form of drug experimentation practised by young and old alike often occurs when a person is suffering from illness. The medications most often used in self-care are the over-the-counter (OTC) products with which the consumer can often obtain relief for almost any self-limiting health concern. Although drugs that relieve pain, congestion, diarrhea, and constipation are still the mainstay of the over-the-counter market, consumers can now purchase an ever-growing variety of products. It is probably safe to say that the vast majority of over-the-counter products are not harmful when used according to their directions, but it is also true that many over-the-counter medications and health aids are biologically active substances that hold the potential for misuse and abuse (Pinger *et.al.* 1995:36).

Misuse of prescription medications occurs when individuals discontinue use too early, use previously prescribed medications to treat a self-diagnosed condition, or use medications prescribed for another person. It can also occur, especially in the elderly, when people forget whether they took their medication and take extra doses unintentionally or when they take the wrong medicine in the dark. Certain types of prescription medications, such as those that alter mood, are subject to greater abuse than others (Pinger *et.al.* 1995:36).

- Reliance on Technology

According to Pinger *et.al.* (1995:37) for people of any age, drug misuse can occur in the context of attempting to maintain health. Many have great faith and high expectations

that scientific research and technological advances will provide answers for their health problems. These expectations are a result, in part, of the marvelous medical advances of the recent past, such as life-saving antibiotic and vaccines. Sensational announcements in newspapers about modern drugs give people every reason to believe that these advances will continue to occur at a rapid pace. One of the unfortunate results of these technological advances is that people have come to expect a life without problems and pain, one where relief from all health problems is immediate and easy. Evidence of these expectations can be observed in drug taking behavior. People take aspirin at the first sign of a headache, cold medicine when they sneeze, and laxatives at the first hint of irregularity. These people, with unrealistic expectations about modern medicine and the role of drugs, are at risk for developing a drug dependence problem.

3.3 FAMILY FACTORS AND THEIR INFLUENCE ON ADOLESCENT BEHAVIOR

3.3.1 Role Differentiation Between Parents

Fathers and mothers play different roles in the course of bringing up children. These roles however should compliment each other. The behavior of the adolescent is also influenced by this role differentiation, e.g. the traditional role of the father within a family is designed to prepare children for impending adult roles. The father teaches moral standards through sharing and through discipline. Mothers are perceived by adolescents as being more responsive and they will most often resort to mothers for favours. The mother teaches household chores such as environment and personal hygiene through

direct instruction. If parents do not internalize the norms and values of society, then the children will do the same and could resort to substance abuse. (Fields, 2001:199).

3.3.1.1 The Effect of Shame on Children

According to Field (2001:170), shame is a deep-rooted feeling, often a result of traumatic childhood experiences that are excessively shaming. Parental imbalance and parenting dysfunction are at the core of these feelings of shame. Shame is defined as the self-looking on oneself and finding the self-lacking or flawed. Individuals may feel exposed, vulnerable, and fearful that others know they are feeling inherently bad and inadequate. Shame is more powerful than simple embarrassment, which is a temporary situation with little long-term impact. In shame, people feel that they will never recover from the negative way others see them.

Shame is a feeling that has an integral role in the individuals' development. Most individuals can overcome feelings of shame and grow as a result of it, getting on with their lives. However, some individuals have been shamed dramatically and frequently, especially during early developmental years, and are unable to overcome it. These individuals are at risk for alcoholism and drug dependence or developing relationships with alcoholics or addicts (Field, 2001:171).

3.3.1.2 High Parental Expectations

Parents are all too often unaware of the degree to which children respond to parental expectations. Regardless of their own substance use, a parent who expects his or her child

not to drink or take other drugs and makes this expectation known can have a tremendous influence on the child's decision not to use substances. Also, parents who have high but realistic expectations for their children's performance can help to create a protective environment. Parents who have expectations beyond what their children are developmentally capable of achieving may instill a self-perception of failure in their children, because it is highly unlikely that such parents will praise their children enough for what they do achieve. This is likely to force children of such parents to abuse substances (Gullota *et.al.* 1995:46).

3.3.1.3 Parent-Child Bonding

The parent-child bond is an extremely potent, primary relationship, which greatly influences behavior. Maccoby and Martin (1993) in Fields (2001:164), describes the parent-child bond as unique among relationships. Nothing is as powerful as the bonding between parent and child. Extraordinary facts of strength and sacrifice have come to be identified with this strong bond.

The child's development is often impaired as a result of a poor bond between parent and child. Self-concept, social and interpersonal relationships, achievement, and identity are negatively affected by inadequate parent-child bond. When a parent loses this positive bonding with a child, the child's sense of loss and anger may never be assuaged. This loss is often found in substance abuse family systems. Often, because of certain circumstances, parents are not available. A variety of conditions may take the parents from the child, for instance death of a parent, illness, job relocation, financial problems

etc. All of these circumstances prevent bonding between child and parent and are extremely disruptive to the child's life and may lead to abuse substances by the child (Fields, 2001:164).

3.3.2 Environmental Influence

When one or more members of a family are unable to fulfill their obligations, a break up in the family unit will result, which will change the family structure. There are a number of environmentally induced factors, which affect the lives of the adolescent.

3.3.2.1 Divorce and Separation

Children grow up to be healthy when they spend their childhood within a healthy and happy family environment. Schwartzberg in Pagliaro and Pagliaro (1996:149), points out that the child from a divorced family, faces intensified problems associated with separation and problems of identification with parental figures. He also further states that for the adolescent, divorce can become the most stressful life event and can lead to substance abuse.

Divorced parents make fewer demands for matured behavior on their children and are less consistent in behavior than parents in intact families. Cobb (1992:215) explains that the impact of divorce on adolescents will vary from one individual to another based on a host of conditions such as the family situation prior to divorce, the adolescent's age, the availability of social supports such as extended family and friends and whether the divorce involves economic hardships.

According to Fields (2001:47) adolescents from divorced homes frequently have a lower self-concept than those from intact homes. The divorced parents communicate less effectively with their children. They are also less likely to ask for their child's opinion than parents in intact families. The divorced mother tries to control the adolescent child by being more restrictive and giving more commands, which the child ignores or resists. The divorced mother uses more negative sanctions than the divorced father. This attitude can contribute to an increased resistance by the adolescent. The functioning of children from a divorced family is affected by the way the family functioned in the years before the divorce. While some adolescents do recover and restabilise their lives after their parents' separation, there are those who do not manage to stabilize and often look for alternative ways of coping with the situation, and this may give rise to maladaptive behavior such as substance abuse.

3.3.2.2 Single-Parent Families

The primary responsibility of providing for the physical, emotional and social needs of children are best met by both parents. Children who come from broken homes often have difficulties in adjusting. Jacobs (1988:56) explains that although it is generally asserted that two individuals at the time of marriage make a lifetime commitment to each other, it is often the case that the commitment cannot be maintained. She asks whether it is necessary to physically separate, or whether the couple should keep their home physically intact even though it is emotionally broken. The social-emotional adjustment of children is better in the long run in a physically broken home, than in a physically intact, and yet emotionally broken home.

Mothers and fathers play differing roles in the upbringing of children, and these roles compliment each other. The absence of one parent means that the remaining parent should assume a dual role. Most parents find it extremely demanding when they have to fulfill both roles, with the result that some roles are neglected. One of the most noticeable differences between adolescents from single parent families and those from intact homes is their economic well-being. Adolescents in single-parent families often face the need to take on part-time jobs. On the positive side is that these adolescents stand to gain in autonomy and independence through being more responsible. However, potential disadvantages can result when responsibilities exceed the adolescent's capabilities. The risk is also there that, because of the neglect of some of these roles, e.g. discipline, the adolescent might get involved in substance abuse (Ray and Ksir, 2002:21).

3.3.2.3 Physical or Sexual Abuse within the Family

Pagliari and Pagliaro (1996:153) have noted that corporal punishment of adolescents by their parents has been associated with subsequent development of several significant psychological problems such as alcohol and drug abuse. They add that other forms of abuse, particularly severe physical and sexual abuse during childhood and adolescence have been frequently reported as antecedent to behavioral problems including substance abuse. Harrison *et.al.*, in Pagliaro and Pagliaro (1996:155) point out that boys in drug abuse treatment groups who admitted to histories of sexual abuse are characterized by psychological and social problems. They add that these children show psychological distress, especially agitation and have abused alcohol and other chemicals regularly and from a young age, in order to self-medicate their distress.

3.4 PSYCHOLOGICAL FACTORS ASSOCIATED WITH SUBSTANCE ABUSE AMONG ADOLESCENTS

A number of the psychological variables, alone and in combination, have been reported to account for adolescent substance abuse.

3.4.1 Conduct Disorder

A repetitive and persistent pattern of behavior involving early aggression, destruction of property, deceitfulness, theft, and violation of parental rules (e.g. running away from home) is indicative of conduct disorder. The implication of this pattern is that adolescents who are at risk for initiating substance abuse are less socially adapted to the demands of the mainstream normative culture. Thus, substance abuse may result from conduct disorder.

There is a significant positive relationship between “early childhood aggression” and “heavy use or abuse of drugs” during adolescence. In addition, a prerequisite for the diagnosis of antisocial personality disorder in adults is the appearance of symptoms of conduct disorder. Antisocial behavior in childhood, significantly increase the risk of persistent adult criminality and have early onset, severe substance abuse in both males and females. Conversely, it also appears that the chronic regular use of various substances can presage or contribute to the development of conduct disorder. Children with parents who have had substance abuse problems are themselves likely to be at high risk for conduct disorder, later substance abuse, and early psychiatric hospitalization (Pagliaro and Pagliaro, 1996:140).

Attention-deficit hyperactivity disorder has been closely related to conduct disorder as a concurrent disorder, an antecedent, and is also a risk factor for the development of problematic patterns of substance abuse among adolescents, particularly boys. Young adults who had been diagnosed as hyperactive in childhood were found to have had greater involvement with alcohol and drug abuse. The three key features of attention – deficit hyperactivity disorder are inattention, impulsivity, and hyperactivity. It is very possible that adolescents with this disorder will use substances to self-medicate and manage their symptoms. The symptoms of inattention include not completing tasks, being easily distracted, being unusually disorganized and forgetting daily activities (Fields, 2001:14).

3.4.2 Depression

Depression can either be an antecedent to, or a consequence of, substance use. For example, adolescents who are depressed may use substances in an effort to forget their problems. Conversely, other adolescents may abuse substances to “party” or to celebrate their teams’ victory, only to subsequently become depressed as a direct result of the substance’s pharmacological action as a sedative hypnotic. In these situations, a vicious cycle can begin in which depression leads to drinking (and further depression) or drinking leads directly to depression, either way, each situation encourages additional drinking for relief (Pagliaro and Pagliaro, 1996:141).

Whatever its cause, depression is commonly associated with the use of various substances by adolescents. The most common reason for using substances is to avoid the

depressive effects associated with emotional deprivation, mood disorder or both. Similarly, substance abuse can provide a depressed adolescent with a way of coping with overwhelming feelings (Pagliaro and Pagliaro, 1996:141).

Disturbances in affect or mood, are common causes of substance abuse and addiction to medical and nonmedical psychoactive substances. Individuals who are experiencing problems in regulating their affect and mood may self-medicate with substances. Substances may be used to alleviate and self-medicate feelings of anxiety or panic. Dysthymic disorder, cyclothymic disorder, atypical depression and bipolar disorder are the primary affective, or feeling disorder associated with self-medicating with substances. Seasonal affective disorder is another form of depression that leads to increased substances abuse, especially during the “sunless” winter months in certain environments (Fields, 2001:08).

3.4.3 Gender Identity Crisis

Gender identity crises typically occur during early childhood and adolescence and are frequently accompanied with problematic patterns of substance abuse. Generally, lesbians, gay and bisexual adolescents and even those unsure of their sexual identity are at a higher risk for substance abuse, truancy and dropping out of school. They experience more psychological stress and lower self-esteem than other teens their age. As conflicts arise over issues of sexual orientation, young people often turn to substances to reduce the pain and anxiety (Pagliaro and Pagliaro, 1996:142).

The above-mentioned authors further state that although gender identity and sexual orientation are established during early childhood, they are largely irrelevant to children until puberty. It is generally during adolescence that boys and girls begin self-selected sexual activity. It is during this time that gay, lesbian, or bisexual youth first typically identify that they “feel different”. This feeling is generally followed by a period of time during which they may notice a particular and pervasive sexual attraction to others of the same gender. Finally, for many, “a coming-out” phase may occur during which they may come to terms with, and accept, their own sexual identity.

Stress, as a general factor, has also been related to substance abuse among adolescents who display a gender identity crisis. In this context, stress has been primarily associated with “being in the closet” and verbal and physical abuse aimed by others at the adolescent’s gender identity. Stress associated with “being in the closet” appears to be particularly acute for gay and lesbian adolescents. Gay and lesbian adolescents, because they generally live at home with heterosexual parents, are particularly loath or unable to come out of the closet. These adolescents often fear rejection by their parents and other heterosexuals who are important to them (e.g. teachers and family members) and turn to substance abuse to cope with stress (Pagliaro and Pagliaro, 1996:143).

3.4.4. Loneliness and Low Self-Esteem

Loneliness among adolescents is most often associated with feeling of rejection or isolation from family and peer groups. Feeling rejected by parents and without adequate parental supervision, adolescents join a peer group (often a gang) that supports substance

abuse. Low self-esteem has been frequently found to be associated with substance abuse among adolescents. According to Caspi (1997:63), the use of marijuana tends to be a vehicle for the expression of personal difficulties in the areas of self-esteem. Learners with “three or more adverse consequences of substance abuse were also two to fifteen times more likely than other students to report such correlates as low self-esteem” (Caspi 1997:63).

3.4.5 Feelings of Hopelessness and Serious Early Childhood Losses

Fields (2001:21) maintains that it is hard to identify a single factor that leads to feeling hopeless, so hopeless that one give up, even temporarily, and stops trying to grow, achieve and develop. Many adolescents feel as if they are not getting anywhere. This could be a feeling of hopelessness due to poverty or financial disaster or of other socioeconomic loss. It could be the hopelessness of not knowing how to read, or blocks in learning or achievement. One or all of these can lead to hopelessness, which can lead to increased substance abuse problems, and addiction. Serious losses during childhood, including the loss of parents because of death or separation (incarceration, abandonment) have been related to substance abuse among adolescents (Pagliaro and Pagliaro, 1996:146).

3.4.6 Previous Substances Use

According to Pagliaro and Pagliaro (1996:146) the best predictor of future behavior is past behavior. A number of studies have demonstrated a positive relationship between pervious and subsequent substance use. Such substance use may involve either the same

or different substance abuse. A corollary of this finding is that the earlier the initiation into the use of substances, the more likely use will continue and become problematic.

3.4.7 Innate Drive to Alter Consciousness

There is a belief that there are four primary drives. The drives are hunger, thirst, sex and the desire to alter consciousness. Drugs have been a major way of altering consciousness. Some feel drugs open avenues to unconscious issues, conflict, and the possibility of an awareness or perception new experience to their life. On the downside, drugs can easily become traps that keep people's minds from being used in a positive way (Fields, 2001:02).

3.4.8. Drug Use as a Passive Activity

Many people are passive procrastinators and conflict avoiders. Substance abuse is a passive activity. Individuals take pills, powder or liquids and wait for the desired effect, which is an alteration of their consciousness. In some cases, such as freebasing cocaine or injecting drugs, the desired effect is almost instantaneous. Too frequently, feelings of boredom, sadness, etc. are not actively worked through; instead, the individual passively changes what he/she feels by using substances (Fields, 2001:03).

3.4.9 Risk-Taking, Behavior- Impulsivity/ Disinhibition

Impulsivity/ disinhibition includes personality traits such as sensation seeking and aggressiveness. Impulsive/ disinhibited individuals are at increased risk for alcohol related problems. Substance use involves taking the risk of use. There have always been

individuals who, when told “no”, are curious and perhaps contrary and translate that “no” into “yes”. This is especially true of adolescents. Substance use affects each individual’s physical and emotional balance; for some, that balance is very delicate, even before they start to use substances (Fields, 2001:08).

3.5 SUMMARY

Obviously an adolescent must have access to a drug before becoming a user of it. The more available the drug is, the easier it is for an adolescent to become a user. Numerous studies show that most illicit drug users received their first dose as a gift from a close friend. As they continue to use, their earliest purchases are likely to be from friends who sell the drug to them at little or no profit. Eventually, they learn where and who the drug dealers are, and this, too, they learn from their peers. Parents can also be a source of drugs for adolescents. Studies found that parents were the most commonly reported source of alcohol for teenagers.

Peer groups influence the social meaning of drug use by associating it with images of social recognition, independence, maturity, fun, and a variety of desirable outcomes. Thus drug use often occurs in peer groups because adolescents reinforce each other’s beliefs in these images. The academic achievement of a child is regarded as a determining factor for the child’s success. Adolescents who fail more than once at school, have a tendency of regarding themselves as outcasts. Drug abuse may occur when there is academic failure.

Fathers and mothers play different roles in the course of bringing up children. These roles however should compliment each other. The behavior of the adolescent is also influenced by this role differentiation, e.g., the traditional role of the father within a family is designed to prepare children for impending adult roles. The father teaches moral standards through sharing and through discipline. The child's development is often impaired as a result of a poor bond between parent and child.

For the adolescent, divorce and separation of parents can become the most stressful life event and can lead to substance abuse. Corporal punishment of adolescents by their parents has been associated with subsequent development of several significant psychological problems such as alcohol and drug abuse.

In the next chapter, the researcher outlines the theoretical framework of substance abuse amongst adolescents (high school learners).

CHAPTER 4

THEORIES FOR EXPLAINING SUBSTANCE ABUSE

4.1 INTRODUCTION

In the previous chapter, the researcher looked at the social, community, family and the psychological factors associated with substance abuse amongst adolescents.

This chapter explores the theories that attempt to explain the phenomenon of substance abuse. The first section outlines the psychosocial models, which includes social learning theory, problem behavior theory, stage theory and the biopsychosocial theory. The second section discusses the sociological theories of criminality, which are social control, or bonding theory and the differential association theory. The third section focuses on the psychopathological model including the social stress theory.

4.2 PSYCHOSOCIAL PERSPECTIVES

The major psychosocial perspectives that have been advanced to explain substance use include: problem behavior theory, social learning theory, stage theory and biopsychosocial theory. Each perspective emphasizes somewhat different factors and processes, but they all view substance use as stemming from the interaction of personality, environmental and behavioral factors.

4.2.1 Problem Behavior Theory

The likelihood of substance abuse is predicted by one's overall propensity to problem behavior. According to Rhodes and Jason (1988:9) problem behavior refers to behavior that is socially defined as either a problem, a source of concern, or simply undesirable, by the norms or institutions of conventional society (e.g. stealing, aggression, and substance use). The occurrence of problem behavior is determined by the outcome of three interconnected systems, which are behavior, personality, and perceived social environment.

The above-mentioned authors further state that the behavior system is differentiated into a problem behavior structure (including drug use, sexual activity, problem drinking and general deviant behavior) and a conventional behavior structure (including involvement with a church or formalized religious activity and academic achievement). Participation in either system serves as an alternative to engaging in the other. For example, participation in academic activities should relate negatively to substance use or other problem behaviors.

Rhodes and Jason (1988:9) states that the personality system is composed of three structures, including:

- The motivational- instigation system (e.g., the expectation for achieving academic goals, independence, and close peer relations).
- The personal belief structure (e.g., social criticism, alienation, self-esteem, and focus of control).

- The personal control system (e.g., tolerance of deviance, religiosity, and the discrepancy between positive and negative functions of problem behaviors).

According to Rhodes and Jason (1988:9) the perceived environment is separated into proximity and distal structures that are composed of variables that are directly or less directly related to problem behavior such as drug use. The variables within the distal structures include:

- Perceived support from parents and from peers.
- Perceived controls from parents and from friends.
- Compatibility between parents and peers in their expectations for behavior.
- The relative influence of peers versus parents.

The proximal structure includes parent and peer approval for problem behavior and peer models for problem behavior.

4.2.2 Social Learning Theory

Social learning theory extends problem behavior theory by suggesting that behavioral patterns will be more or less problematic depending on the opportunities and social influences to which one is exposed, and the skillfulness with which one performs, and the balance of rewards one receives from participation in these activities. The rewards one receives for behavior will directly affect the likelihood that one will continue that behavior. These rewards are themselves a function of the opportunities available for participation in groups and activities, as well as the skills an individual applies in his or her behaviors. The risk for problem behavior is thus reduced when youngsters perform

skillfully in conventional settings. Substance use is conceptualized as a socially learned, purposeful, and functional behavior which is the result of the interplay of social-environmental and personal factors. A person will continue to abuse substances depending on the rewards and social support that he/ she receives. If there are no adverse effects then the abuse will continue.

4.2.3 Stage Theory

Kandel (1980, 1982) in Rhodes and Jason (1988:10) suggests a psychosocial perspective in which involvement with drugs proceeds through different stages. Adolescents typically progress sequentially from beer and wine to hard liquor and cigarettes, next to marijuana, and then on to other illicit drugs. Although early involvement does not necessarily lead to the later stages, usage at one stage is very unlikely without usage at the earlier stage. According to Rhodes and Jason (1988:10) Kandel's research suggests that somewhat different predictors are important with different types of drugs. Specifically, prior involvement in deviant activities and the use of cigarettes, beer, and wine are most important for predicting hard liquor use.

Beliefs and values favorable to the use of marijuana and association with marijuana-using peers are the strongest predictors of initiation into experimentation with marijuana. Poor relations with parents, feelings of depression, heavy marijuana use, unconventional attitudes, and exposure to drug-using peers and role models are most important for predicting initiation into illicit drugs other than marijuana (e.g. cocaine and heroin).

4.2.4 Biopsychosocial Theory

A new psychosocial perspective on substance abuse is emerging from the field of behavioral medicine and from recent interest in competence and coping. Rhodes and Jason (1988:10) state that the biopsychosocial model is based on two central premises. The first is that substances may be used as a coping mechanism for two independent reasons namely that they can reduce negative affect, or that they can increase positive affects.

Individuals may use a substance to reduce negative affect when they are anxious or over aroused, or they may also use the same substance to enhance a positive affect when they are fatigued, depressed, or under aroused. The theory suggests that several processes (cognitive, physiological, and stress reaction) may intervene between the occurrence of a potentially stressful event and the occurrence of an adverse reaction.

The second premise is that it is useful to distinguish between two types of stress-coping skills, namely those generic responses that help the individual to deal with a variety of stressors and those responses that are used to cope with temptations for substance use. Skills to cope with stress (e.g. enduring and daily stressors) are distinguished from skills relevant for coping with temptation (e.g. peer pressure). This theory conceptualizes substance abuse as a product of deficiency in coping skills that are relevant to a variety of stressors. When faced with personal or social pressure to use substances, youth with social skills deficits are more likely to engage in usage.

4.3 SOCIOLOGICAL MODELS

4.3.1 Social Control Theory

Travis Hirschi (1969) is the theorist who propounded the social control or bonding theory. Hirschi linked delinquent behavior to the quality of the bond that an individual maintains with society, stating that delinquent acts result when an individual's bond to society is weak or broken. Hirschi theorized that individuals who most firmly bond to social groups such as the family, the school, and peers are less likely to commit delinquent acts. He contends that 4 elements are the main factors that tie the individual to conventional society.

4.3.1.1 Attachment

Attachment refers to the strength of a child's bond to such key persons as teachers, parents, and friends. In this context, norm violations are viewed as acts that are contrary to the wishes and expectations of significant others. Children will only violate norms to the extent that they are indifferent to the wishes and expectations of others, particularly parents and teachers. Parental attachment is considered to be the most important because it is parents who provide the initial socialization and thereby have an extremely important impact on the internalization of norms. Substance abuse amongst children is viewed as one of the act contrary to the wishes and expectations of every parent. Children abuse substance only to be indifferent with their parents' wishes. Substance abuse may also be the result of lack of parental attachment.

4.3.1.2 Commitment

Commitment involves an individual's stake in continuing a particular line of action. People who are committed to conventional forms of conduct such as running a business, going to school, or maintaining a reputation in the community, have invested considerable time, energy, money and self-esteem in this line of activity. When these people consider engaging in deviant behavior, they must weigh the cost of this deviant behavior in terms of the risk involved in losing the investment they have made. Substance abuse is considered the result of lack of commitment to conventional forms of conduct e.g. going to church, playing sport, and running a business. When abusing substances they don't weigh the cost if caught, like losing a reputation, low self-esteem because no time or energy is invested in any activity. Only those who are committed to a particular line of action will refrain from substances.

4.3.1.3 Involvement

Involvement focuses attention on the types of activities that occupy the individual's day, and assumes that individuals who engage in conventional activities may be too busy to find time to pursue deviant behavior. Hirschi (1969) recognizes that it is naïve to assume that delinquency is prevented simply by juvenile involvement in conventional activities most of the time. It is Hirschi's contention that it is involvement in specific activities that parallel attitudinal commitments to conventional success goals that inhibits the commission of delinquent acts. Substance abuse is the result of lack of involvement (lack of recreational facilities). If involved, the child will be too busy to find time to abuse substances. Involvement in school-related activities inhibits children to abuse substances.

4.3.1.4 Belief

Belief refers to a person's sense of obligation to obey the rules of society. There are variations in the degree to which people believe that they should follow the rules of society. The less a person feels that he should obey the rules, the more likely he or she is to violate them. This respect for the values of the law and legal system is derived from intimate relations with other people, especially parents. Hirschi developed a causal chain from attachment to parents, through concern for the approval of persons in positions of authority, to the belief that the rules of society are binding on one's conduct (Bartollas, 1997:177). Substance abuse may arise from a person's lack of sense of obligation to obey the rules of society. This belief to obey rules arises from the relationship that a child has with parents. If parents abuse substances it may be difficult for a child to believe that substance abuse is an act against the law.

4.3.2 Differential Association Theory

Bartollas (1997:163) presents Edwin H Sutherland's proposal that delinquents learn deviant behavior from others. Sutherland's theory has nine propositions:

4.3.2.1 Criminal behavior is learned. Criminal behavior is not inherited. The person who is not trained in crime (deviant behavior) does not invent criminal behavior. In this regard, substance abuse can be compared to criminal behavior. According to this proposition, children who abuse substances learned it from others. If a child abuses substance it does not mean that his or her parents did abuse substances.

4.3.2.2 Criminal behavior is learned in interaction with other persons in a process of communication. The communication can either be verbal (direct) or symbolic (communication of gesture). Substance abuse is learned when one is having a conversation with another person who is also abusing substances and it can be a direct conversation or symbolic.

4.3.2.3 The principal part of the learning of criminal behavior occurs within intimate personal groups. This allows for the influence of the impersonal agencies of communication such as television and the movies. But also emphasized the overwhelming importance of interpersonal relationship on the genesis of criminal behavior. Substance abuse is learned through intimate groups like amongst friends or close relatives. This learning also allows the media to make an impact in teaching how to abuse substances.

4.3.2.4 When criminal behavior is learned, the learning includes:

- Techniques of committing the crime, which are sometimes very complicated, sometimes very simple.
- The specific direction of motives, drives, rationalizations, and attitudes. Not only does the learning of criminal behavior involve the ways the crime is to be committed, but also why it is to be done.
- In case of substances, the learning also includes simple and complicated techniques; for example, abusing cigarettes is simple than cocaine, which has many difficult methods of use.

- The learning of substance abuse does not only include ways of abusing but also the desires and reasons why these substances are to be abused.

4.3.2.5 The specific direction of motives and drives is learned from definitions of legal codes as favorable or unfavorable. In some societies, an individual is surrounded by people who invariably regard the laws as rules to be observed. In others he or she may be surrounded by persons whose definitions (perceptions) are favorable to violations of the laws. The desire to abuse substances is learned from the society's definition of what norm violation is.

4.3.2.6 A person becomes delinquent because of an excess of definitions favorable to violation of law over definitions unfavorable to violation of law. This represents the differential association principle, which is the heart of the theory. It refers to both criminal and anti-criminal associations and has to do with counteracting forces. When people become criminals, they do so because of contacts with criminal patterns and also because of isolation from anti-criminal patterns. People abuse substances because of associating themselves with those who abuse substances and isolating themselves from those who view substance abuse as norm violation.

4.3.2.7 Differential association may differ in frequency, duration, priority, and intensity. Frequency and duration are self-explanatory and refer to how one is exposed to particular definitions and when the exposure began. Priority refers to the time in life when one was exposed to the association (developed in early childhood and persisting throughout life).

Intensity concerns the prestige of the source of the behavior pattern (criminal or anti-criminal and emotional reactions related to the association). People who associate themselves with substance abusers differ in frequency, duration and priority, meaning they differ in how one was exposed to substances, the time in life when one was introduced to the people he or she associate with.

4.3.2.8 The process of learning criminal behavior by association with criminal and anti-criminal patterns involve all of the mechanisms that are involved in any other learning. The learning of criminal behavior is complex and is not restricted to mere imitation. Criminal behavior may differ from anti-criminal behavior, but the learning process through which the respective behaviors are acquired is the same. According to this proposition, learning how to abuse substance is the same as learning any other behavior.

4.3.2.9 While criminal behavior is an expression of general needs and values, it is not explained by those needs and values, since non-criminal behavior is an expression of the same needs and values. Thieves steal to secure money, but honest labourers' work to secure money. This really explains nothing since it apparently accounts for both deviant and non-deviant actions.

DeFleur and Quinney (1966) in Bartollas (1997:164) say that criminal behavior results from the learning of criminal motivations, attitudes, and techniques by means of symbolic interaction with close-knit, informal primary groups. Substance abuse in an expression of

needs and values, and it is not explained by those needs and values since other people have same needs and values but don't resort to substances.

4.4 PSYCHOPATHOLOGICAL MODEL

4.4.1 Social Stress Theory

Social stress theory is derived from Albee's (1982) model of psychopathology, as an alternative approach to the study of adolescent substance abuse. This theory integrates the traditional emphasis on individual and family systemic variables with the recent research on competence and coping. Additionally, in contrast to more theoretical approaches, the social stress theory seeks to explicitly address the broader social variables that influence adolescent behavior. From this perspective, adolescent substance usage is viewed as the long-term outcome of multiple experiences with significant others and social systems from birth through adolescence.

A youngsters experience in the family, school, and community are seen as influencing the identification with parents, peers, and role models and the development of effective coping strategies. Children may be less certain of their own abilities and less equipped to cope with a variety of social stressors during adolescence if they

- have not identified with parent figures and consequently have failed to incorporate their values and standards.
- have failed to acquire the necessary skills to offset the pressures to use drug.
- have not had adequate educational and employment opportunities.

These youths are more likely to be influenced by peers who are in the same situation and may be influenced by such peers to engage in substance abuse as a means of coping with stress.

The risk for substance abuse can be conceptualized as a fractional equation with stress in the numerator and positive attachment, coping skills, and resources in the denominator.

$$\frac{\text{Stress}}{\text{Attachment} + \text{Coping Skills} + \text{Resources}} = \text{Risk for Substance Abuse}$$

This conceptualization is a derivation of Albee's (1982) model of psychopathology, in which the risk for psychopathology is conceived of as a function of stress and organic factors and the extent to which the negative impact of these factors is offset by coping skills, competencies, and social support. The likelihood of an adolescent engaging in drug usage is seen as a function of the stress level and extent to which it is offset by positive attachments, coping skills and resources.

4.4.1.1 Stress

Rhodes and Jason (1988:13) have identified several categories or levels of stress and have examined the role in the development of problem behaviors including: major life events, daily hassles, enduring life strains, induced transitions, and developmental transitions.

The first category consists of major life events such as a car accident or the death of a parent. These events frequently occur suddenly and entail an initial period of shock followed by gradual readjustment. For almost all of these events, the adolescent has no control over when they occur. Adolescents may turn to drugs as a means of coping with the pain and disruption caused by any of these events.

A second level of stress consists of everyday problems or “daily hassles”, such as arguments over the use of the car or curfew times. Adolescent’s problem behaviors are more related to level of day-to-day conflicts and pressures than to more isolated stressful life events. Adolescents may use substances to escape from family or school interactions characterized by chronic conflict.

The third category of stress consists of enduring life strains such as difficulties in the family, school and the community. These stressors usually persist over time and are not easily resolved (e.g. a lack of privacy, insufficient opportunities for recreation, or inadequate school conditions). This type of stress is most related to factors in the socioeconomic environment. For example, certain adolescents may be exposed to poor school or housing situations because of discrimination and the inequitable distribution of societal resources. If school is a place where the adolescents can obtain few successes and the community provides few models of competent coping, the adolescent may have less confidence in his/ her chances for success. To these youths, standards of success may appear unreachable, and risk-taking behaviors that flaunt societal expectations become more attractive and appealing.

A fourth category of stressor faced by adolescents includes life transition that requires adaptation over time, such as a transition to a new school, obtaining one's first job, or getting married. Such transitions may be particularly stressful if they involve interruptions in peer relations. For example, when a family moves to a new community, an adolescent is often faced with the difficult tasks of entering a new school system, and making new friends. Drugs may facilitate acceptance into a new peer group or alleviate heightened levels of social anxiety.

Development changes during adolescence (e.g. puberty, adherence to group norms, changing alliances from family to peers) are stressful events, and can be considered the fifth type of stressor. Reductions in self-esteem, pressures to fit in with peers, striving toward independence (including curiosity, need for adventure, and rebellion) can often lead to the initiation of substance use among adolescents.

4.4.1.2 Attachment

Children who have not incorporated their values and standards, may be at greater risk for substance abuse. With gaps in attachment to adult role models and dissatisfaction with support received at home, these adolescents experience similarly difficult home lives. This process is best explained by the social developmental model of behavior. Rhodes and Jason (1988: 14) argue that, attachments or bonds are generally formed within the family, the school, and the peer group. In each of these contexts, 3 variables influence behavior patterns:

- The opportunities and influences to which one is exposed.
- The skillfulness with which one performs.
- The relative balance of rewards one receives.

4.4.1.3 Skills

According to Rhodes and Jason (1988:15) developmental research has indicated that most children and adolescents acquired a broad base of coping and social skills. The emergence of skills accelerates during early adolescence, when school, family, and peer relations are in transition and when there is increased pressure exerted on adolescents by adults to accept responsibility for a variety of interpersonal behaviors and events.

Rhodes and Jason (1988:15) state that the development of skills is to a large extent influenced by the patterns of attachments and stressors that occur during childhood and adolescence. That is, children who have not been provided with opportunities to learn appropriate skills, have not been rewarded for effective coping, and are exposed to debilitating stressors and are likely not to acquire a comprehensive set of adaptive skills.

4.4.1.4 Resources

Rhodes and Jason (1988:15) argue that youth risk-taking behaviors are also influenced by a wide array of resources in the community. The school and neighborhood are constant sources of information, which influences behavior both directly and indirectly. If the school and the community provide adequate models of success and coping and society's

standards of success appear obtainable, then the adolescent may have more hopes for success.

On the other hand, youth confronted with inadequate and deficient resources may be at greater risk for substance abuse. To be more concrete, dropout rates in many inner-city schools are staggering and the unemployment rates in poverty areas are excessive, particularly among minorities. Those youths living in such poverty-infested areas often do not earn basic educational credentials, and thus have few employment opportunities. Without resources and positive role models in the community, these adolescents may be more at risk for using substances.

4.5 SUMMARY

Social learning theory maintains that behavioral patterns will be more or less problematic depending on the opportunities and social influences to which one is exposed, the skillfulness which one performs, and the balance of rewards one receives from participation in these activities. Substance abuse is socially learned, purposeful, and functional behavior, which is the result of the interplay of social-environmental and personal factors.

According to biopsychosocial theory, individuals use substances to reduce negative affects when they are anxious or over aroused, or they may also use the same substance to enhance a positive affect when they are fatigued, depressed, or aroused. Substance abuse is a product of deficiency in coping skills that are relevant to a variety of stressors.

Problem behavior theory maintains that the likelihood of substance abuse is predicted by one's overall propensity to problem behavior. The occurrence of problem behavior is determined by the outcome of three interconnected systems, which are behavior, personality and perceived social environment.

According to social stress theory, adolescent drug usage is viewed as the long-term outcome of multiple experiences with significant others and social systems from birth through adolescence. The likelihood of adolescent engaging in drug usage is seen as a function of the stress level and extent to which it is offset by positive attachments, coping skills, and resources.

Social control or bonding theory state that substance abuse is the result of lack of bond to social groups such as family, school, and peers. Differential association theory says that criminal behavior is learned not inherited. The person who is not trained in crime does not invent criminal behavior. Criminal behavior is learned in interaction with other persons in a process of communication. The communication can either be verbal or symbolic.

Psychoanalytic theory state that, individuals use substances to satisfy the archaic oral longing that is a sexual longing, a need for security, and need for the maintenance of self-esteem simultaneously. Sociocultural theory maintains that the attitude of the culture and ethnic customs may also facilitate patterns of substance abuse. Substance dependence and addiction are influenced by sociological factors such as age, occupation social class,

subculture and religious affiliation. Systems theory considers interactions with others, notably the family of origin, as a basis for intergenerational transmission of substance abuse.

In the next chapter, the researcher gives an analysis and interpretation of data that was collected.

CHAPTER 5

DATA ANALYSIS AND INTERPRETATION OF FINDINGS

5.1 INTRODUCTION

In the previous chapter, the researcher looked at different theories explaining the phenomenon of substance abuse amongst adolescents. This chapter focuses on the presentation, analysis, interpretation and the discussion of major findings. The results are discussed in relation to the literature review and some of the theories explained in the previous chapter.

The primary aim of this chapter is to present, analyse and interpret the data collected by means of semi-structured interviews that were conducted with the 30 respondents from the two selected high schools. Statistical Package for Social Science (SPSS) was used to analyse the responses. Frequency distribution tables have been utilized for the presentation of data.

The first section of this chapter entails the analysis and interpretation of data regarding the personal information of respondents. The second section contains the analysis and interpretation of data regarding the educational level of respondents. The third section includes the analysis and interpretation on the family characteristics. Fourthly an analysis is presented of the interpretation of data on the substance abuse scale. The fifth section contains analysis and interpretation of data regarding the characteristics of drug abuse. This is followed by the sixth section which contains the analysis and interpretation of

data regarding the funding of drugs abuse. The next section deals with analysis and interpretation of data regarding the suppliers of drugs and the eighth section contains analysis and interpretation of data regarding the school authorities and abuse of substances. The ninth section includes the analysis and interpretation of data regarding the parent/ guardian and drug abuse. Section ten deals with the analysis and interpretation of data regarding the factors that encourage learners to abuse substances and lastly, an analysis and interpretation of data regarding criminal involvement and drug abuse are given.

5.2 PERSONAL INFORMATION

Personal information regarding the respondents are presented in this section.

5.2.1 Respondents' Gender

The following information indicates which sex group is mostly abusing substances.

Table 5.1: Frequency Distribution of Gender

Gender	Freq	%
Male	23	77
Female	7	23
Total	n=30	100

It is clear from this table that out of 30 respondents, 23 (77%) are males and 7 (23%) females. The findings indicate that substance abuse is associated more with males than females. This finding is not surprising because Khan (2002:52) found that the reported drinking, smoking of dagga and tobacco amongst the youth in a nationwide survey is

very high, especially amongst males. Madu and Matla (2003:405) found that alcohol drinking is more acceptable culturally by males than by females in black South African communities. They also found that drug use is associated more with boys than girls.

5.2.2 Respondents' Age Group

Information on the respondents' age group is to show the age group among the respondents that is mostly abusing substances.

Table 5.2: Frequency Distribution of Age

Age of Respondent	Respondents	
	Freq	%
13	7	23
14	6	20
15	4	13
16	2	7
17	3	10
18	3	10
19	5	17
Total	n=30	100

The majority of the respondents are 13 (23%) and 14 (20%) years of age, meaning that this is the age group that abuse substances most. Respondents who are 19 years of age also abuse substances (17%). This might be due to the fact that they are regarded as adults and the law does allow them to consume some of the drugs like tobacco and alcohol.

These findings are in line with those by Trojanowicz (1992:409) who found that substance abuse is a phenomenon experienced by children and adolescents worldwide. It appears that children become victims of substance abuse at a progressively younger age.

5.2.3 Respondents' Religious Affiliation

Information on the respondents' religion is very important as it shows some source of encouragement behind the respondents' decision to abuse substances.

Table 5.3: Frequency Distribution of Religion

Religious Affiliation of Respondents	Respondents	
	Freq	%
African Traditional Religion	25	83
Christianity	5	17
Islam	-	-
Total	30	100

It is evident from the findings that those affiliated to the African traditional religion, abuse substances more, and this might be ascribed to their religion. There are some African traditions that allow substance abuse. According to Phaswana and Pelzer (1999:01) alcohol is consumed during different types of festivities and ritual ceremonies, such as ceremonies for propitiation of ancestral spirits, ceremonies held for the deceased, etc. During such ceremonies adolescents are allowed to consume alcohol.

Seventeen percent (17%) of the respondents are Christians and they abuse substances. According to the social control theory, these adolescents lack a sense of obligation to obey the rules. It is also not surprising to see fewer Christians abusing substance because it is not in line with the Christian belief. Fields (2001:59) found that lack of church involvement appears to be a factor in the initiation of drug use.

5.3 EDUCATIONAL LEVEL

The educational level of the respondents, their parents or guardian are presented, analyzed and interpreted below.

5.3.1 Educational Level of Respondent

Table 5.4: Frequency Distribution of Educational Level of Respondents

Grade of Respondent	Respondents	
	Freq	%
8	5	17
9	7	23
10	5	17
11	6	20
12	7	23
Total	n=30	100

This table reveals that respondents who are in grade 9 and grade 12 abuse substances more than any other grade. According to De Jongh (1997:40) younger adolescents are at a higher risk for abusing substances. He also found that grade 9 and 10 seem to be more

prone to experimenting with drugs. Flisher *et.al.* (1998:04) found that the prevalence rates for grade 8 and 11 learners were consistently higher for males than for females.

5.3.2 Educational Level of the Respondents' Mother

Table 5.5: Frequency Distribution of the Respondents' Mothers' Educational Level

Mothers' Educational Level	Respondents	
	Freq	%
No Education	3	10
Primary Education	15	50
Secondary Education	3	10
Tertiary Education	9	30
Total	n=30	100

According to this table, the majority of the respondents' mothers 15(50%) have primary education. Some of the mothers have not had formal education.

5.3.3 Educational Level of the Respondents' Fathers

Table 5.6: Frequency Distribution of the Respondents' Fathers' Educational Level

Fathers' Educational Level	Respondents	
	Freq	%
No Education	2	7
Primary Education	16	53
Secondary Education	4	13
Tertiary Education	8	27
Total	n=30	100

It is evident from this table that the respondents' fathers 16(53%) have primary education. Some of the fathers have tertiary education.

5.3.4 Educational Level of the Respondents' Guardians

Table 5.7: Frequency Distribution of the Respondents' Guardians'

Educational Level

Educational Level of Guardians	Respondents	
	Freq	%
No Education	7	23
Primary Education	5	17
Secondary Education	6	20
Tertiary Education	3	10
Stays with Both Parents	9	30
Total	n=30	100

It is clear from this table that the majority of the respondents' guardians 7(23%) have no educational qualification at all. Nine (9) respondents don't have guardians. They live with both parents.

5.4. FAMILY CHARACTERISTICS

The aim of the question was to understand and know the kind of family that the respondent is coming from. Aspects such as the number of siblings who lives with the respondent, marital status of parents, mother's, and father's or guardian's employment are presented, analyzed and interpreted below.

5.4.1 The Person the Respondent Lives with

Table 5.8: Frequency Distribution of Person that the Respondents Lives with

Person/s the Respondents are Living with	Respondents	
	Freq	%
Both Parents Together	3	10
Mother Only	3	10
Father Only	3	10
Grandparents	6	20
Siblings	6	20
Family Members (Uncle etc)	3	10
Alone	6	20
Total	n=30	100

Of special importance in this table is that about 70% of the respondents indicated that they do not stay with their parents. Lack of parental control might be a factor prompting them to use substances. Fields (2001:40) found that the child's development is often impaired as a result of a poor bond between parent and child. Self-concept social and interpersonal relationships are negatively affected by inadequate parent-child bond, which may lead to substance abuse.

5.4.2 The Location of the Parents if they are not staying with their Children.

Table 5.9: Frequency Distribution of the Respondents' Parent's Whereabouts

Parent's Whereabouts	Total	
	Freq	%
Staying with both parents	9	30
Both Parents Staying at their Workplace	6	20
Mother Staying at her Workplace	5	17
Father Staying at his Workplace	3	10
Both Parents are Deceased	7	23
Disappeared	-	-
Total	n=30	100

Nine (9) respondents indicated staying with both parents. Of special importance in this table is that the majority of the respondents, 23%, live alone because their parents are deceased. Twenty percent (20%) of respondents stay alone because both parents stay at their place of work.

These findings are in line with those by Fields (2001:48) who found that unavailability of parents due to job relocation can prevent bonding between child and parent and also lead to substance abuse. Pagliaro and Pagliaro (1996:146) found that serious losses during childhood, including loss of parents because of death, are related to substance abuse amongst adolescents.

5.4.3 Marital Status of Parents

Table 5.10: Frequency Distribution of the Respondents' Parental Marital Status

Marital Status of Parents	Respondents	
	Freq	%
Married	6	20
Single	6	20
Divorced	12	40
Separated	6	20
Total	n=30	100

This table shows that the majority of the respondents (40%) are from divorced families. The table also shows an equal number (20% each) of respondents are from a family where parents are married, single or separated. What is also striking here is that 80% of the respondents are from single-headed families.

The above findings are in line with those by Pagliaro and Pagliaro (1996:148) who found that divorce can become the most stressful life event and can lead to substance abuse. They also found that adolescents from divorced parents, face intensified problems associated with separation and problems of identification with parental figures. Ray and Ksir (2002:03) found that single-headed families often have difficulties in adjusting and often face the need to take part-time jobs. Substance abuse arises when the responsibilities exceed the adolescent's capabilities.

5.4.4 Respondents' Number of Siblings

Table 5.11: Frequency Distribution of the Respondents' Number of Siblings

Siblings	Respondents	
	Freq	%
1-5	26	87
6-10	4	13
Total	n=30	100

This table indicates that the majority of the respondents (87%) are from families with 1-5 siblings. All respondents are from families with many children.

5.4.5 Mother's Employment

Table 5.12: Frequency Distribution of the Respondents' Mothers' Employment

Mother's Employment	Respondents	
	Freq	%
Unemployed	5	17
Self-Employed	3	10
Domestic Worker	8	27
Professional Worker	1	3
Unknown	13	43
Total	n=30	100

Out of 30 respondents only 17 indicated their mothers' employment. The findings indicate that most mothers work as domestic workers. Therefore, most adolescents are from poverty- stricken homes.

5.4.6 Fathers' Employment

Table 5.13: Frequency Distribution of the Respondents' Fathers' Employment

Father's Employment	Respondents	
	Freq	%
Unemployed	3	10
Self-Employed	9	30
Domestic Worker	3	10
Professional Worker	-	-
Unknown	15	50
Total	n=30	100

Out of 30 respondents, only 15 indicated their fathers' employment. An overwhelming majority of fathers are self-employed.

5.4.7 Guardians' Employment

Table 5.14: Frequency distribution of the Respondents' Guardians' Employment

Guardian's Employment	Respondents	
	Freq	%
Unemployed	10	33
Self-Employed	3	10
Domestic Worker	5	17
Professional Worker	3	10
Do not stay with guardians	9	30
Total	n=30	100

Only 21 out of 30 respondents indicated that they live with their guardians, nine live with both parents. The majority of the guardians, the table indicates, are unemployed. This

finding is in line with those by Pinger *et.al.* (1995:36) who found that drug abuse and drug dealings are all too common responses to harsh conditions of economic deprivation.

5.4.8 Respondents' Monthly Family Income

Table 5.15: Frequency Distribution of the Respondents' Monthly Family Income

Family Monthly Income	Respondents	
	Freq	%
R500-R1500	14	47
R2000-R3500	10	33
R4000-R6500	6	20
Total	n=30	100

This table indicates that most respondents are from families with a monthly income of R500-R1500. Surprisingly, substances seem to be abused even by respondents with R4000-R6500 monthly family income. These findings are in line with those by Pinger *et.al.* (1995:36) who found that drug abuse is a common response to harsh conditions of economic deprivation. The adolescent is likely to be tempted to deal in drugs to buy food. Wealth can foster thrill seeking that may include drug experimentation.

5.5 SUBSTANCE ABUSE SCALE

The information in this section reveals the type of drug used, age at first use, where and how the respondents get money to buy drugs, the frequency of drug use, where the drugs are obtained, and the respondents' involvement in criminal activities.

5.5.1 Respondents Substance Abuse

Table 5.16: Frequency Distribution of the Respondents' Substance Abuse

Substance Abuse	Respondents	
	Freq	%
Yes	30	100
No	-	-
Total	n=30	100

According to this table, all respondents are substance abusers. These findings show that the researcher was able to find only those involved in substance abuse.

5.5.2 Respondents' Marijuana Use

Table 5.17: Frequency Distribution of the Respondents' Marijuana Use

Marijuana Use	Respondents	
	Freq	%
Yes	29	97
No	1	3
Total	n =30	100

Ninety-seven percent (97%) indicate using marijuana. This indicates that marijuana is one of the drugs that are commonly used by adolescents. This finding is in line with those by the Human Science Research Council (1996), which found that marijuana is the illicit drug that is most frequently used by teenagers, and more than half of high school learners report that they have used marijuana at least once. The use of marijuana by adolescents is significantly higher than use by the general population.

5.5.3 Respondents Cocaine Use

Table 5.18: Frequency Distribution of the Respondents' Cocaine Use

Cocaine Use	Total	
	Freq	%
Yes	14	47
No	16	53
Total	n=30	100

Fifty-three percent (53%) of the respondents indicate not using cocaine. This finding is not surprising because Pagliaro and Pagliaro (1996:18) found that cocaine is expensive and very difficult to obtain. Forty percent (47%) reported using cocaine. This finding is in line with those by Benschhoff and Janikowski (2000:99) who found that cocaine is one of the most powerful and widely abused drugs. Pagliaro and Pagliaro (1996:17) also found that cocaine has been used approximately by 15% of North American children and adolescents. Approximately 15% of high school seniors have reported a lifetime prevalence of cocaine use.

5.5.4 Respondents' Alcohol Use

Table 5.19: Frequency Distribution of the Respondents' Alcohol Use

Alcohol Use	Respondents	
	Freq	%
Yes	29	97
No	1	3
Total	n= 30	100

It is clear from this table that the majority of the respondents, ninety-seven percent (97%) use alcohol. Alcohol is regarded as the mostly abused substance worldwide.

This finding is in line with those by Pagliaro and Pagliaro (1996:10) who found that the use of alcohol is a common part of adult socializing and is often seen by children and adolescents as a sign of maturity or adulthood. For this reason, it appears to be particularly attractive to youth. Khan (2002:52) also found alcohol to be the most abused substance, and as a major cause of crime, violence and moral decay in South Africa.

5.5.5 Respondents' Cigarette Use

Table 5.20: Frequency distribution of the Respondents' Cigarette Use

Cigarette Use	Respondents	
	Freq	%
Yes	28	93
No	2	7
Total	n=30	100

The above statistics is very clear. It is not surprising to see large numbers of respondents using cigarettes. Morojele and Brook (2005:140) found that cigarette smoking is socially acceptable in many countries.

5.5.6 Respondents' Snuff Use

Table 5.21: Frequency Distribution of the Respondents' Snuff Use

Snuff Use	Respondents	
	Freq	%
Yes	1	3
No	29	97
Total	n=30	100

This table indicates that majority of the respondents do not use snuff. Only 3% indicated using snuff. This finding is not surprising since the National Institute on Drug Abuse (2002) found that snuff was very popular in the eighteenth century in Europe but by the nineteenth century cigars had become the primary tobacco products.

5.5.7 Respondents' Glue Use

Table 5.22: Frequency Distribution of the Respondents' Glue Use

Glue Use	Respondents	
	Freq	%
Yes	11	37
No	19	63
Total	n=30	100

According to this table only 37% of the respondents use glue. According to the National Institute on Drug Abuse (2005), glue sniffing is the most common form of solvent abuse. It is usually a group activity, which occurs in isolated places away from adults. The 12-16 age group is mainly involved.

5.6 CHARACTERISTICS OF DRUG ABUSE

5.6.1 Age at which Drugs were first Used

Table 5.23: Frequency Distribution of the Respondents' Age At First Using Drugs

Age At First Use	Respondents	
	Freq	%
11	18	60
12	10	33
13	2	7
Total	n=30	100

According to this table the majority of the respondents (60%) started using drugs at the age of 11. This finding is in line with those by Pagliaro and Pagliaro (1996:10) who found that the average for first-time experience with alcohol is 11 years for boys and 11 and a half years old for girls. Wilson (2000:09) found that most American children and adolescents smoke and use marijuana and inhalants and at the youngest age ever.

5.6.2 Place of Abuse

Table 5.24: Frequency Distribution of Place of Abuse

Place of Abuse	Respondents	
	Freq	%
Home	7	23
School	9	30
Both	14	47
Total	n=30	100

According to the table above, the majority of the respondents indicated that they use substances both at home and school. This finding is in line with those by Pinger *et.al.* (1995:32) who found that drug use occurs almost everywhere, in homes and schools, on the assembly line, etc. In other words, there is no place that is unaffected by drugs. Fields (2001:46) found that the school environment plays a major role in the process of developing adolescent's drug use.

5.6.3 Circumstances for Drug Use

Table 5.25: Frequency Distribution of the Respondents' Circumstances for Drug Use

Circumstances for drug use		Freq	%
		Yes	17
Bored	No	13	43
Total		n=30	100
Yes		14	47
Stressed	No	16	53
Total		n=30	100
Yes		1	3
Happy	No	29	97
Total		n=30	100
Yes		2	7
Tired	No	28	93
Total		n=30	100
Yes		11	37
Anytime	No	19	63
Total		n=30	100

Fifty-seven (57%) of the respondents use drugs when they are bored. This finding is not surprising because Pinger *et al* (1995:37) found that lack of alternatives to drugs, such as recreational facilities, organized youth groups, etc, contribute towards substance abuse. Hirschi (1969), the founder of social control theory, in Bartollas (1997:177) found that individuals who do not engage in conventional activities, and are not committed to a

particular line of activity like playing sport, find time to pursue deviant behavior including substance abuse.

The National Household Survey on Drug Abuse (2004) also found that the majority of adolescents use substances daily. Forty-seven (47%) of the respondents use drugs when stressed. According to social stress theory, adolescent drug usage is viewed as the long-term outcome of multiple experiences with significant others and social systems from birth through adolescents. The likelihood of adolescents engaging in drug usage is seen as a function of the stress level and extent to which it is offset by positive attachments, coping skills, and resources.

5.6.4 Frequency of Substance Use

Table 5.26: Frequency Distribution of the Respondents' Frequency of Substance Use

Frequency of Use	Respondents	
	Freq	%
Once	3	10
Twice	8	27
More Than Twice a Day	19	63
Total	n=30	100

The majority of the respondents indicated that they use drugs more than twice a day. This finding is in line with those by the National Household Survey on Drug Abuse (2004), which found that an estimated 93.4 million Americans aged 12 or older, indicated in

2004, that they had smoked cigarettes daily at some time in their lives. They also reported using marijuana daily.

5.6.5 Where Respondents Learnt to Abuse Substances

Table 5.27: Frequency Distribution of where the Respondents Learnt to Abuse Substances

Where Respondents Learnt to Use Drugs	Respondents	
	Freq	%
Friends (Peers)	15	50
Family Members	12	40
Both	2	7
Strangers	1	3
Total	n=30	100

According to this table the majority of the respondents learnt to abuse substance from friends and family members. These findings are consistent with those by Sutherland the founder of the differential association theory. Sutherland, in Bartollas (1997:163) found that substance abuse is learnt from others through the process of communication. Substance abuse is learnt through intimate groups such as amongst friends, close relatives or the media. Pinger *et.al.* (1995:32) found that media advertising exerts a powerful influence on people of all ages, but particularly on the young. It is usually a friend, older sibling, or parent who introduces adolescents to drug use. Ray and Ksir (2002:03) found that adult and peer groups play an important role in teaching adolescents to use drugs. Drug use may be a condition for acceptance as a member of some peer groups.

5.7 FUNDING OF DRUG ABUSE

5.7.1 Respondents' Money Suppliers to Buy Drugs

Table 5.28: Frequency Distribution of the Respondents' Money Suppliers

Money Suppliers	Respondents	
	Freq	%
Parents	12	40
Friends	9	30
Relatives	3	10
Strangers	6	20
Total	n=30	100

This table shows that 40% of respondents get money from parents and 30% from friends. These findings indicate that most of the respondents get the money to buy drugs from their parents. Pinger *et.al.* (1995:32) found that it is usually a friend, older sibling, or parent who introduces adolescents to drug use.

5.7.2 Other Means by which Respondents Fund their Drug Use

Table 5.29: Frequency Distribution of Other Means by which the Respondents Fund their Drug Use

Means of Getting Money	Respondents	
	Freq	%
Stealing	6	20
Working	10	33
Pocket Money	14	47
Total	n=30	100

It is evident from this table that 47% of the respondent are given money by their parents or guardians as pocket money, and use it to buy drugs instead. Twenty percent (20%) get their money through stealing. These findings are in line with those by Pagliaro and Pagliaro (1996:220) who found that theft is another common method used by adolescents to obtain the funds necessary to support their illicit substance abuse.

5.8 SUPPLIERS OF DRUG ABUSE

5.8.1 Where Respondents Buy their Drugs

Table 5.30: Frequency Distribution of the Respondents' Place of Buying Substances

Place of Purchase	Respondents	
	Freq	%
School	7	23
Community	9	30
Both	14	47
Total	n=30	100

According to this table, the majority of the respondents indicated buying drugs at home and at school. This finding is also in line with those by Pagliaro and Pagliaro (1996:32) who found that there is no place unaffected by drugs, meaning that drugs are sold everywhere.

5.8.2 Who Sells Drugs to the Respondents

Table 5.31: Frequency Distribution of the Respondents' Drug Suppliers

Seller of Drugs	Respondents	
	Freq	%
Friends	12	40
Relatives	6	20
Strangers	6	20
All of the above	6	20
Total	n=30	100

Forty percent (40%) of the respondents indicated buying drugs from a friend. Fields (2001:40) found that the earliest purchases are likely to be from friends who sell the drugs to them at little or no profit. Eventually, adolescents learn where and who the drug dealers are, from their peers.

5.9 THE EFFECTS OF DRUGS

5.9.1 Respondents' Knowledge Regarding Effects of Drugs

5.32: Frequency Distribution of the Respondents' Knowledge Regarding Effects of Drugs

Knowledge of Drug Effects	Respondents	
	Freq	%
Yes	13	43
No	17	57
Total	n=30	100

This table indicates that the majority of the respondents have no knowledge about the effects of substance abuse. This might be due to the fact that drug education is not included in many school curricula.

5.9.2 How Respondents View the Effects of Drugs

Table 5.33: Frequency Distribution on how the Respondents' View the Effects of Drugs

Respondents' View	Respondents	
	Freq	%
Real	3	10
Not Real	9	30
No Knowledge of Drug Effects	18	60
Total	n=30	100

This table shows that the majority of the respondents who have indicated hearing of the effects that drugs do not believe in those effects. It is not surprising to see that some of the respondents do not believe that substances have any effects. When there are no immediate adverse effects, the user is likely to continue using the substances. This can be attributed to the fact that the user has developed tolerance and habituation of the drug. Fields (2001: 45) found that the user becomes dependent mentally on the substance. The dependence is purely mental, forcing the user to rely on the drug to deal with everyday challenges of life.

5.10 SCHOOL AUTHORITIES AND ABUSE OF SUBSTANCES

5.10.1 The Awareness of School Authorities of their Learner's Abuse of Substance

Table 5.34: Frequency Distribution of the School Authorities' Knowledge Regarding Learners' Substance Abuse

School Authorities' Awareness	Respondents	
	Freq	%
Yes	23	77
No	7	23
Total	30	100

This table indicates that the school authorities are aware that students are abusing drugs. A poor homework response, high failure rate, truancy, aggressiveness towards teachers and fellow learners has led the authorities to quickly realize that students are abusing substances.

5.10.2 Measures Taken by the School Authorities

Table 5.35: Frequency Distribution of Measures Taken by Schools

School's Measures	Respondents	
	Freq	%
Suspension	8	27
Nothing	14	47
Corporal Punishment	1	3
Unknown	7	23
Total	n=30	100

The table above indicates that the majority of the respondents say that their school authorities are doing little or nothing to stop them from abusing drugs. This might be due to the fact that schools do not have a clear policy that explains the measures to be taken if a student caught using drugs at school.

5.10.3 The Respondents' View Regarding the Effectiveness of Measures by School Authorities

Table 5.36: Frequency Distribution of Effectiveness of Measures

Respondent's View of Effectiveness	Respondents	
	Freq	%
Effective	3	10
Not Effective	20	67
Unknown	7	23
Total	n=30	100

This table shows that the majority of the respondents, which is 20 out of 23, feel that the measures taken by the authorities are not effective. Eighty-seven (87%) of respondents see no effectiveness in the measures taken by the schools to stop drug abuse. Corporal Punishment is amongst those measures. Pagliaro and Pagliaro (1996: 193) found that corporal punishment of adolescents by their parents or teachers has been associated with subsequent development of problems including alcohol and drug abuse.

5.11 PARENTS/GUARDIANS AND DRUG ABUSE

5.11.1 Parents' or Guardians' Awareness of Children Abusing Drugs

Table 5.37: Frequency Distribution of Parents' Knowledge of their Children's Substance Abuse

Parents/Guardian's Awareness	Respondents	
	Freq	%
Yes	8	27
No	22	73
Total	n=30	100

Seventy-three percent (73%) of the respondents indicate that their parents are not aware of their children's use of illicit drugs. This finding is in line with those by Gullotta, Adams & Montemayor (1995:40) who found that parents are not aware that their children are secretly accessing the stores of alcohol or drugs.

5.11.2 Parents or Guardian's Measures against Drug Abuse

Table 5.38: Frequency Distribution of Parents or Guardians' Measures Against Drug Abuse

Parents/ Guardian's Measures	Respondents	
	Freq	%
Punishment	4	13
Shout/Scold	5	17
Counseling	2	7
Rehabilitation	1	3
Nothing	10	33
Unknown	8	27
Total	n=30	100

The above statistics is very clear, but of most importance is that the majority of mothers are doing nothing to solve the problem. The social learning theory maintains that the rewards one receives for behavior will directly affect the likelihood that one will continue that behavior. Pagliaro and Pagliaro (1996:193) found that corporal punishment of adolescents by their parents or teachers has been associated with subsequent development of problems including alcohol and drug abuse.

5.12 FACTORS ENCOURAGING LEARNERS TO ABUSE SUBSTANCES

5.12.1 Table 5.39: Frequency Distribution of Factors Encouraging Learners to Abuse Substances

Factors Encouraging Substance Abuse		Respondents	
		Freq	%
Peer Pressure	Yes	26	87
	No	4	13
	Total	n=30	100
Stress	Yes	22	73
	No	8	27
	Total	n=30	100
Lack of Parental Control	Yes	19	63
	No	11	37
	Total	n=30	100
Poor School Performance	Yes	20	67
	No	10	33
	Total	n=30	100
Family Problems	Yes	21	70
	No	9	30
	Total	n=30	100
Loneliness or Rejection	Yes	22	73
	No	8	27
	Total	n=30	100
Boredom	Yes	21	70
	No	9	30
	Total	n=30	100

The above statistics are very clear, and of great importance is that 87% of respondents use substances because of peer pressure. Pinger *et.al.* (1995: 31) found that peer groups are influential in determining whether adolescents engage in drug experimentation. Bezuidenhout (2000:121) also found that substance abuse is associated with peer influence. Peer groups act as subgroups, providing the individual with an opportunity to manifest behavior that is not controlled by the external environment. The use of drugs, and their availability in such groups, will result in the new members experimenting with drugs or being initiated into the use of drugs by other users or by drug dealers.

Seventy-three percent (73%) of the respondents use substances because of stress. This finding is not surprising since the social stress theory has identified the categories and levels of stress and their role in the development of problem behavior including substance abuse. One of the categories of stress consists of major life events such as a car accident or death of a parent. For almost all of these events, the adolescent has no control over when they occur. Adolescents may turn to drugs as a means of coping with the pain and disruption caused by any of these events.

Sixty-seven percent (67%) of the participants indicated poor school performance as a factor forcing them to resort to substance abuse. This finding is in line with those by Fields (2001:39) and Clintock (2003:10). Fields (2001:39) found that substance abuse is often the choice for those who fail academically. Discouraged by their failure in school and the additional shame of being labeled poor learners, they resort to substance abuse. Clintock (2003:10) also found that one of the wishes parents have about their children is

school achievement. Adolescents who fail more than once at school, have a tendency of regarding themselves as outcasts. In a number of cases, and drug abuse occurs when there is academic failure.

Sixty-three percent (63%) of the participants indicated lack of parental control as a factor prompting them to use substances. This finding is not surprising because Fields (2001:40) found that the child's development is often impaired as a result of a poor bond between parent and child. Inadequate parent-child bonding negatively affects self-concept, social and interpersonal relationships, and this may lead to substance abuse. Bezuidenhout (2000:122) found that poor parent -child attachment or parental control leads to a lack of commitment to conventional activities, and this itself is a reason why adolescents resort to drug taking.

The findings indicate that 70% of the participants use substance because of the problems they encounter at home. Brook, Cohen and Whiteman (1990:116) found that the initial step towards adolescent drug use is taken during childhood years, when children do not receive proper care from parents and grow up in conflict-ridden homes. Abuses within the family, particularly severe physical and sexual abuse during adolescence, have been reported as antecedent to substance abuse.

Seventy-three percent (73%) indicated feeling of loneliness/rejection as one of the factors causing them to abuse substances. This finding is not surprising since Pagliaro and Pagliaro (1996: 145) found that loneliness among adolescents is most often associated

with feelings of rejection or isolation from family and peer groups. Feeling rejected, adolescents join a group that support drug use.

Seventy percent (70%) use substance because of boredom. Pinger et.al (1995:32) found that lack of alternatives to drugs, such as recreational facilities, organized youth groups, etc, contribute towards substance abuse. Hirschi (1969) the founder of social control theory, in Bartollas (1997:177) also found that individuals who do not engage in conventional activities and who are not committed to a particular line of activity such as playing sport, find time to pursue deviant behavior, including substance abuse.

5.13 CRIMINAL INVOLVEMENT AND DRUG ABUSE

5.13.1 Respondents Involvement in Criminal Activities Under the Influence of Substance

Table 5.40: Frequency Distribution of Involvement in Criminal Activities

Involvement in Criminal Activities	Respondents	
	Freq	%
Yes	30	100
No	-	-
Total	N=30	100

The overwhelming respondents indicated that drugs pushes or drive them to criminal activities. These findings are in line with those by Walters (2000:56) who found that drugs are related to crime in multiple ways. Most directly, it is a crime to use, possess, manufacture, or contribute drugs classified as illegal or harmful. Parry, Pluddeman, Louw and Leggett (2002:45) found that 46% of prisoners or parolees reported using drugs at the

time, or just prior to, the offense for which they were incarcerated. Khan (2002:52) found that between 65% and 70% of violent crimes in Cape Town are attributed to the intake of alcohol.

5.13.2 Types of Criminal Activities

Table 5.41: Frequency Distribution of Types of Crimes Committed

Crimes	Respondents	
	Freq	%
Assault	7	23
Robbery	5	17
Rape	3	10
Theft	3	10
Housebreaking	6	20
Vandalism	6	20
Total	n=30	100

These findings are in line with those by Pagliaro and Pagliaro (1996:189) who found that substance abuse dramatically increases the risk of violent behavior and contributes significantly to the prevalence of adolescent suicide, robbery, rape, assault, etc. Ray and Ksir (2002:18) found a correlation between alcohol and assaults, spousal abuse and child abuse. Self-report studies amongst offenders indicate that they had been consuming alcohol before the violent act.

5.14 SUMMARY

Substance abuse is associated more with males than females. Adolescents, who are in the 13 to 14 year age group, abuse substances more than adolescents in the other age groups. Respondents affiliated to the African traditional religion abuse substances more and it was found that there are Christians who also abuse substances. Respondents in grade 9 and 12 abuse substances more than any other grade. The majority of the respondents' mothers and fathers have primary education whilst the guardians have no formal qualification.

Most respondents do not live with their parents. They either live with their siblings, grandparents, or alone. A common reason for not staying with their parents is death of a parent. The majority of the respondents are from divorced families, separated or single-headed families with 1-5 siblings. Most mothers are employed as domestic workers, fathers are self-employed and most guardians are unemployed. Adolescents from families with high and low monthly income are more likely to abuse substances.

Substances commonly abused include marijuana, cocaine, alcohol and alcohol and cocaine combined. Snuff and glue are not commonly abused. Most respondents started abusing substances at the age of 11. Substances are abused, anytime (when bored, tired, happy etc), and everywhere. Peers and family members play a major role in making the adolescents abuse substance.

Respondents get money to buy substances through stealing, working or use pocket money from parents or guardians. Drugs are sold everywhere by peers, family members and strangers. Most adolescents do not have knowledge regarding the effects of abusing substances. The school authorities are aware that some learners use substances and no effective measures have being implemented to stop them. Only a few respondents mentioned that their parents are aware that they abuse substances. Some parents are doing nothing; regarding their children's abuse of substances. Others scold their children whilst other send them to rehabilitation or to counselors.

There are many factors which cause substance abuse amongst learners. Peer pressure is found to be a major influence in the adolescent's decision to abuse substances. Some respondents abuse substances because of some stressful events in their lives. Substance abuse is also common among those who fail academically. Lack of parental control leads to lack of commitment to conventional activities, and this itself is a reason for adolescents' substance abuse. Family problems, loneliness, and boredom also contribute to substance abuse among adolescents.

In the next chapter, the researcher gives a general summary of the study, conclusion and recommendations.

CHAPTER 6

GENERAL SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

The previous chapter focused on the presentation, analysis and interpretation of data discussed in relation to the literature review and some of the theories. This chapter focuses on the general summary of the major findings of the study, evaluation of the study, conclusions and recommendation.

6.2 GENERAL SUMMARY

The study investigated the factors contributing towards substance abuse among a group of high school learners at Eisleben village. Learners from grade 8-12 were selected as a sample of the study. The researcher used a qualitative research methodology.

Chapter 1 provided a general orientation of the study, which include: motivation of the study, research problem, aim of the study, objectives of the study, operationalisation of concepts, research questionnaire, and the area of the study. Assumptions were also made. Another major section of the chapter is the research methodology, which includes the type of research, the research design, research procedures, and the method of data collection. A description of the research population, sampling and strategy were also discussed.

Chapter 2 dealt with the literature review. It explained the incidence and effects of substance abuse, and its relation to crime. Different types of substances were discussed. The first section looked at the general orientation whereby the relationship between all substances and crime was highlighted. Other sections included a discussion on substances such as alcohol, cocaine and marijuana. Their forms and appearance, methods of use, tolerance potential, habitual potential, overdose potential, withdrawal effects, long and short-term effects and their specific relation to crime, were discussed at length.

In Chapter 3, the discussion was about the factors contributing towards substance abuse among learners/adolescents. It concentrated on the social and community factors associated with substance abuse amongst adolescents. These factors include influences of culture, economic status, modern society, peer pressure, and school environment. Family factors and their influences on adolescent behavior were also highlighted. Lastly, the chapter dealt with the psychological factors causing substance abuse among adolescents.

Chapter 4 focused on the theories explaining the phenomenon of substance abuse. Psychosocial models, such as social learning theory, problem behavior theory, stage theory and the biopsychosocial theory were discussed. Sociological theories of criminality, which are social control or bonding theory and differential association theory, were equally highlighted and expounded.

Chapter 5 dealt with the presentation, analysis and interpretation of the major findings. During analysis of data, it was discovered that substance abuse is associated more with

males than females and it is a phenomenon experienced by children and adolescents. Adolescents who are affiliated to African traditional religion abuse substances more than those affiliated to Christianity. Church involvement does not deter substance abuse. The majority of adolescents who abuse substances do not live with their parents owing to death or absence of parents because they work away from home. The unavailability of parents due to job relocation can prevent bonding between child and parent and can lead to substance abuse. Serious losses during childhood, including loss of parents are related to substance abuse amongst adolescents. An overwhelming majority of the respondents are from divorced families. Divorce can prove to be a stressful life event for a child. Adolescents from families with a divorce background face intensified problems associated with separation and problems of identification with parental figures. Adolescents from single-headed families and those whose parents live at their work place are likely to abuse substances.

A large number of children in a family can lead to substance abuse because these are likely to fight for attention and, if they do not get it, they may resort to drugs. The respondents are from poverty-stricken homes where the parent/guardian is either not employed, or working as domestic worker. Drug abuse and drug dealing are all too common responses to harsh conditions of economic deprivation.

Marijuana is the most frequently used drug by teenagers, and its use is significantly higher amongst adolescents than the general population. Alcohol is a common part of adult socializing and is seen by adolescents as a sign of maturity or adulthood and it

appears to be particularly attractive to youth. Alcohol is the most abused substance and a major cause of crime, violence, etc. Adolescents use cigarette because smoking is socially acceptable in many countries. Cocaine is one of the most powerful and widely abused drugs. Most adolescents don't use it because it is expensive and difficult to obtain. Snuff use is low because it was popular in 18th century and 19th century, but cigars have become very popular. Glue snuffing is one of the most common forms of solvent abuse. Adolescents start using drugs at the age of eleven.

Substance abuse occurs everywhere. There is no place which is unaffected by drugs. Most adolescents use drugs more than twice a day. Substance abuse is learned from others through intimate groups: friends, relatives, etc. The peer group plays an important role in making adolescents use drug. It is usually, a friend, older sibling, or parents who introduces adolescents to drug use. Adolescents mostly get money to buy drugs from parents or by stealing. Theft is another common method used by adolescents, to obtain the money necessary to support their illicit habit. Earliest purchases are likely to be from friends. These adolescents lack knowledge regarding the effects of drugs and those who have knowledge continue using these substances because of dependence and tolerance.

The school suspends those who use drugs and sometimes punishes those caught. Respondents do not see the effectiveness of such measure because children continue using substances. Most parents are not aware that their children are abusing substances. Parents who know that their children use drugs, do not take appropriate measures to stop

them from doing so. Some shout at, or punish their children. Some parents send their children to rehabilitation centers and others send them to counseling centers

There are many factors causing substance abuse among adolescents. Peer pressure is found to be one of the factors. The peer group is influential in determining whether adolescents engage in drug experimentation. Adolescents turn to drugs as a means of coping with stress. The school environment plays a major role in the process of getting adolescents to use drug. Substance abuse is often the choice for those who fail academically. Since most respondents do not live with parents, lack of parental control is a major contributing factor as well.

A child from a family with problems is likely to use drugs. Abuses within the family, conflict-ridden homes, feelings of loneliness or rejection during adolescence may all lead to substance abuse. Boredom or lack of alternatives to drugs, contributes to drug use and abuse. There is a strong relationship between drugs and crime. All respondents admitted to committing crime while intoxicated. Crimes such as assault, robbery, rape, housebreaking, and vandalism are the most common.

6.3 EVALUATION OF THE STUDY

6.3.1 Aim of the Study

The aim of the study which was to explore the factors which contribute to substance abuse amongst a group of high school learners was achieved. This aim was achieved as reflected in the discussion presented in chapter three (Table 5.5.24). The findings

indicated that peer pressure contributes greatly towards substance abuse amongst learners. Poor academic performance was found to be another important contributing factor. The findings revealed that substance abuse is often the choice for those who fail academically. Lack of parental control and attachment is antecedent to drugs. Family problems including divorce, conflict-ridden homes, force adolescents to resort to drugs to cope with the stress. Lack of recreational facilities also prompt adolescents to use drugs because they have too much free time at their disposal.

6.3.2 Objectives

- To explore and understand the underlying factors that contributes towards substance abuse amongst the research group.

The findings reveal that eighty seven percent (87%) (Table 5.5.24) use substances because of peer pressure. Seventy- three percent (73%) use substances to cope with the stress in their lives. Sixty- three percent (63%) use substance due to lack of parental control. Sixty -seven percent (67%) use substances because of poor school performance. Family problems and boredom also contribute to substance abuse with both factors affecting 70% of the respondents. Seventy -three (73%) abuse substances due to a feeling of loneliness or rejection.

- To identify high-risk areas where learners learn or associate with other addicts and learn about drugs.

It has been discovered that adolescent's use and associate with other addicts everywhere. Twenty-three (23%) (Table 5.5.15) learn and associate with addicts at school. Thirty percent (30%) learn to use drugs in their communities. Forty-seven percent (47%) indicate learning and associating with other addicts both at home and in their communities.

- To help the school community come up with solutions to drug abuse

This research is the first of its kind to the affected schools at Eisleben village. Its findings may help the school community to solve the problem of substance abuse.

6.3.3 Research Questions

All the research questions were answered by the findings of this study.

- What are the underlying factors that contribute towards substance abuse amongst the research group?

This question was answered. The findings in chapter five (Table 5.5.24) reveals that the underlying factors are lack of parental control, peer pressure, boredom, poor school performances, stress, family problems, and a feeling of loneliness or rejection.

- What are the influences that may contribute towards the use of illegal substances?

The literature reviews in chapter three and five shows that there are many influences and among others are social and psychological influences. Social influences are the family environment, the media, peers and the school. These influences were all found to have an impact on the adolescents' decision to use illegal substances. Psychological influences include amongst others, feeling of loneliness and stress.

6.3.4 Assumptions for the Study

All the assumptions were supported by the findings of this study.

- Adolescents raised within dysfunctional families will resort to drugs as a form of escape from their family problems.

The assumption above was supported by the findings of the study. Forty percent (40%) (Table 5.4.3) of the respondents are from divorced families. Twenty percent (20%) of respondents are from single-headed families and a further 20% of the respondents are from separated parents. This finding was supported by the literature that adolescents from families with divorce background face intensified problems associated with separation and a problem of identification with parental figures.

- Association with substance users during adolescents can influence adolescents to adopt similar practices.

This assumption was undoubtedly supported by the findings. Fifty percent (50%) of the respondents (Table 5.5.12) use substances because of associating themselves with peers who also abuse substances. The theory states that substance abuse is a learned behavior which one acquires through intimate personal groups such as friends, and close relatives.

- The use of drugs among parents is associated with the experimentation with various substances by adolescents.

This assumption was supported by the findings of this study. Forty percent (40%) indicated using substances because they saw family members including parents, abusing substances. Another forty percent (40%) (Table 5.5.13) shows that adolescents get money from their parents to support their habit.

6.4 RECOMMENDATIONS

Based on the findings of this study, the recommendations are as follows:

Teachers exert a significant influence on students' attitudes, knowledge, and opinions. They can complement a school's drug abuse programme by incorporating drug abuse prevention strategies into their subject matter at all grade levels.

Teachers must inform learners that they disapprove of drug abuse. Remaining quiet gives the impression of approval or unconcern. Learners should be told that they would be reported if they come to school in possession of drugs or under the influence thereof.

The school must work with the Community Policing Forum so that the Police can come to school unexpectedly to search the learners for illegal substances. Those found in possession of the substances must reveal their suppliers so that the law can deal with them.

School officials must establish clear, consistently enforced drug-use policies that specify drug offenses, consequences (including notification of the police), and procedures. Security measures should be implemented to eliminate drug use from school premises and school functions.

Social workers, psychologists or counselors must be notified so as to help learners already abusing drugs. Professional assistance should also be provided to learners who have family problems or personal problems to avoid them resorting to drug use as a coping mechanism.

Learners must be taught awareness of self and others, positive attitude and values, responsible decision making, and social interaction skills. The school community must encourage learners' involvement in sport.

Teachers must be trained to identify learners who abuse substances. Signs that may indicate drug use include redness around the eyes, dramatically changed appearance such as dirty hair, dilated pupils, reduced motivation, slurred speech, failing grades, etc.

Collaborative plans should be made with parents, school boards, treatment agencies, concerned group and the community as a whole to ensure successful programmes.

6.5 CONCLUSION

The aim of the study, namely to explore the contributory factors that lead to substance abuse amongst a group of high school learners at Eisleben village, was achieved. The results of this study are consistent with other studies in indicating that environmental and psychological factors are risk factors for adolescents' substance abuse. The findings of this research revealed that the family plays an important role in the adolescents' decision to abuse substances. Factors such as peer pressure, poor academic performances, boredom, lack of parental control, and stress highly contribute towards substance abuse amongst adolescents. The findings of this study should be considered when planning and implementing substance abuse preventive measures.

7. REFERENCES

- Ahuja, R. (2001). *Research Methods*. Jaipur and New Delhi: Rawat Publication.
- Allan, A., Roberts, M.C., Allan, M.M., Pienaar, W.P., & Stein, D.J. (2001). Intoxication, Criminal offences and suicide attempts in a group of South African problem drinkers. *South African Medical Journal*. Vol 91 (2), Page 145-150.
- Alvarado, G.G. (2002). *Youth crimes*. Indonesia: Bessey Publishing Company.
- Babbie, E.R. (1992). *The practice of social research* 6th ed. California: Wadsworth Publishing Company.
- Bartollas, C. (1997). *Juvenile Delinquency* 4th ed. New York: Ally and Bacon Press.
- Brook, J.S., & Morojele, K.N. (2005). Predictors of cigarettes use among South African Adolescents. *International Journal of Behavioral Medicine*. Vol 12(4), Page 207-217.
- Bhana, A., Parry, C.D.H., Pluddemann, A., Myers, M., Morojele, N.K., & Flisher, A.J. (2002). The South African Community Epidemiology Network on Drug Use (SACENDU) Project. Phase 1 to 8 (July 1996- June 2000). Cannabis and Mandrax. *South African Medical Journal*. Vol 92, Page 542-547.

- Beck, A.T., Wright, F.D., Newman, L., & Liese, B. (1993). *Substance Abuse*. New York: Guilford Press.
- Benshoff, J.T., & Janikowski, T.P. (2000). *Rehabilitation Model of Substance Abuse Counseling*. Canada: Wadsworth.
- Boys, A. & Marsden, J. (2003). Perceived functions predict intensity of use & problems in young substance users. *Journal of Addiction*. Vol 98 (7), Page 951.
- Brook, J.S., Cohen, P., Whiteman, M. (1990). A family interaction approach. *Genetic Psychology Monographs*. Vol 2, Page 116.
- Brown, S.A. (2002). Effects of alcohol use. *Journal of Alcoholism*. Vol 24 (2), Page 164-171.
- Caspi, A. (1997). Personality Differences Predict Health-risk behaviors in adulthood: "Evidence from a longitudinal study". *Journal of personality and social psychology*. Vol 73, Page 1052-1063.
- Clintock, A. (2003). *Drug Addiction*. Singapore: Eagles Publishing Company.
- Cobb, N.J. (1992). *Adolescence, continuity and diversity*. California: Mayfield Publishing Company.

Dawkins, M.P. (1997). Drug use and violent crime among adolescents. *Journal of adolescence*. Vol 43 (2), Page 130-136.

Dawson, D.A. (2002). The link between family history and early onset alcoholism: Earlier initiation of drinking or more rapid development of dependence. *Journal of studies on Alcoholism*. Vol 65 (5), Page 637-646.

De Jongh, J. (1997). Leisure, boredom and substance abuse among South African adolescents: is there a link? *Unpublished thesis*: University of Western Cape.

De Vos, A.S. (1998). *Research at grass roots*. Pretoria: JL Van Schaik Publisher.

Drug and Drug Trafficking Act no. 140 of 1992, South Africa. Cape Town: Butterworth.

Emmett, D. & Nice, G. (1998). *Understanding drugs*. London: Athenaeum Press.

Erlandson, D.A. (1993). *Doing naturalistic inquiry, a guide to methods*. London: Sage Publications.

Fields, R. (2001). *Drugs in perspective. A personalized look at substance use and abuse*, 4th ed. New York: McGraw-Hill Companies.

Flisher, A.J., Parry, C.D.H., Lombard, C.J., & Muller, M. The South African Community Epidemiology Network on Drug Use (SACENDU): *Part IV: Prevalence rates of alcohol Cape Town Students in Grade 8 & 11. Symposium paper presented at the 4th Annual Congress of the Psychological Society of South Africa*, Cape Town, September 1998.

Flisher, A.J., Parry, C.D.H., Lombard, C.J., Muller, M., & Evans, J. (2003). Substance use by adolescents in Cape Town. *Journal of Adolescent Health*. Vol 32(1), Page 58-65.

Fried P.A, & Smith A.M., (2001). A literature review of the consequences of marijuana exposure: An emerging theme of a deficiency in aspects of executive function. *Journal of Neurotoxicology and Teratology*. Vol 23 (1), Page 1-11.

Gordon, J.U. (1997). *Managing multiculturalism in substance abuse service*. United State of America. Sage Publication.

Goldstein, J.P. (1985). Drugs, Crime and the tripartite Framework. *Journal of contemporary drug problem*. Vol 42 (5), Page 218-312.

Gullotta, T.P., Adams, G.R., & Montemayor, R. (1995). *Substance Misuse in Adolescence*. London: Sage Publications.

Gouws, E., & Kruger, N. (1994). *The adolescent: an educational perspective*. Durban: Digma Publications.

Harder, S., & Reitbrock, S. (1997). Predictions of psychotropic effects after smoking marijuana. *International Journal of Clinical Pharmacology and Therapeutic*. Vol 35(4), pp 155-159.

Harrison, P.A., Fulkerson, J.A., & Beebe, T.J. (1997). Multiple substance abuses among adolescent physical and sexual abuse victims. *Journal of Child Abuse and Neglect*. Vol 6, Page 629-639.

Haughton, E. (2002). *How do drink & drugs affect me?* London: Hodder Wayland.

Hawkins, J.D., Catalano, R.F., & Miller J.Y. (1992). Risk and protective factors for alcohol & other drug problems in adolescence & early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*. Vol 112(1), Page 64-105.

Human Science Research Council (HSRC). *Research Findings: Drugs and Alcohol intake's contribution to crime*. <http://www.hsrc.ac.za/media/1996/11/19961128.html>. Accessed 28 November 1996.

Jacobs, J. (1988). *Drug abuse among white high school students in an urban setting*. Pretoria: JL Van Schaik Publishers.

Jessor, R. (1977). *Problem behavior and psychosocial development: A longitudinal study of Youth*. New York: Academic Press.

Khan, F. (2002). *Servamus: South Africa- a leader in drug abuse*. Republic of South Africa: Briza Publication.

Leggett, T., Parry, C.D.H., & Pluddeman, A. (2004). Illicit drug-using offenders and dealers in Substance Abuse: *A profile for law enforcement*. *Acta Crimologica*. Vol 17(2), 153-167.

Levant, G. (1988). *Keeping kids drug free*. San Diego: Laurel Grel Publishing Company.

Liquor Act no. 27 of 1989 (as amended), South Africa. Cape Town: Butterworth.

Lynskey, M., & Hall, W. (2000). The effects of adolescent cannabis use on educational attainment: *A review* *Addiction*. Vol 95 (11), Page 119-158.

Madu, S.N., & Matla, M.P. (2003). Correlation for perceived family environmental factors with substance use among adolescents in South Africa. *Psychological Reports*, Vol 92, Page 403-415.

Morojele, N.K. (1999). Adolescent Drug Use Research in South Africa: Special issues & Special challenges. *International Society for the study of behavioral, Development Newsletter*, Vol 2 (36), Page 4-5.

Morojele, N.K., Flisher, A.J., Muller, M., Ziervogel, C.F., Reddy, P., & Lombard, C.J. (2002). Measurement of risk and protective factors for drug use and anti-social behavior among high school students in South Africa. *Journal of Drug Education*. Vol 32, Page 25-39.

Morojele, N.K., & Parry, C.D.H. (2002). South African research on alcohol and drug use problems. *Background paper for meeting: Research on Mental Health and Substance Abuse in Developing Countries*. Cape Town, South Africa. Medical Research Council: Parow.

Morojele, N.K., Parry, C.D.H., Ziervogel, C., & Robertson, B. (2002). Adolescent alcohol misuse: correlates and implications. *African Journal of Drug & Alcohol Studies*. Vol 1(2), Page 110-124.

Molina, P., & Pelham, R. (2003). Neurobehavioral links between violence and psychoactive substances. *Journal of Addiction*. Vol 5, Page 55-82.

Mouton, W.L. (1997). *Research at a social activity: The sociological dimension*. Pretoria: J.L Van Schaik Publishers.

National Institute on Alcohol Abuse & Alcoholism (NIAAA). *Alcohol Alert*. <http://pubs.niaaa.nih.gov/publications/aa28.htm>. Accessed 24 October 2001.

National Institute on Alcohol Abuse & Alcoholism (NIAAA). *10th Special Report to the United State Congress on Alcohol & Health*. Bethesda, M.D: National Institute of Health, (2000).

National Institute on Alcohol Abuse & Alcoholism (NIAAA). *Alcohol and Tolerance*. <http://pubs.niaaa.nih.gov/publications.htm>. Accessed 03 March 2003.

National Institute on Drug Abuse (NIDA) *Cigarettes and other Nicotine Products*. <http://www.drugabuse.gov/Infobox/tobacco.html>. Accessed 20 September 2002.

National Institute on Drug Abuse (NIDA). *Facts about substance abuse and risky behavior*. <http://hiv.drugsabuse.gov>. Accessed 12 August 2004.

National Institute on Drug Abuse (NIDA). *Drugs of abuse*. <http://www.nida.nih.gov>. Accessed 25 November 2005.

National Institute on Drug Abuse (NIDA). *Inhalant Abuse: Research Report*. <http://www.nida.nih.gov>. Accessed 16 November 2005.

National Household Survey on Drug Abuse (NHSDA). *Illegal Substances: Research Report*. http://www.stopaddiction.co.za/annual_report. Accessed 11 March 2004.

Neuman, M.L. (1997). *Social research methods: Qualitative and quantitative research approach*. United State of America: Allyn and Bacon.

Newcomb, M., & Earlywine, M. (2001). " Interpersonal Contributors to Drug Use: The Willing Host." *American Behavioral Scientist*. Vol 39, Page 33-42.

Oakley, R., & Charles, K. (2002). *Drugs, society and human behavior 9th ed*. New York: McGraw Hill Companies.

Pagliari, A.M., & Pagliaro, L. (1996). *Substance use among children and adolescents: its nature, extent, and effects from conception to adulthood*. New York: Wiley Publishing Company.

Parry, C.D.H. (2005). South Africa: Alcohol today. *Journal of Addiction*. Vol 45, Page 426-429.

Parry, C.D.H. (2002). Substance abuse intervention in South Africa. *World Psychiatry*. Vol 4(1), Page 560-570.

Parry, C.D.H., Pluddemann, A., Louw, A., & Leggett, T. (2002). The 3-Metros study of drugs and crime South Africa. *American Journal of Drugs and Alcohol Abuse*. Vol5 (2), Page 43- 53.

- Paterline, B. (2003). *Drug identification and investigation for law enforcement*. Wildomar: Staggs Publishing Company.
- Petersen, R.C., & Robin, L.N. (1994). *Drug abuse and drug abuse research*. New York: Haworth.
- Phaswana, N., & Peltzer, K. (1998). Substance use among South African university students: A quantitative study. *Psychological Reports*. Vol 82 (2), Page 4-50.
- Pinger, R.R., Payne, W.A., Hahn, D.B., & Hahn, E.J. (1995). *Drugs issues of today*. United State of America: C Brown Publishers.
- Ray, O. & Ksir C. (2002). *Drugs, Society, and human behavior*. New York: McGraw-Hill Companies.
- Rhodes, J.E. & Jason L.A. (1988). *Preventing Substance Abuse among children and adolescents*. New York. Pergamon Press.
- Schuckit, M.A. (1998). *Alcohol & Alcoholism*. New York: McGraw Hill Companies.
- Shannon, M. (2002). *Alcohol*. Port Melbourne: Echidna.

Soo, Y.L. Seung, M.O. & Chung, K.H. (2006). Effects of marijuana smoke condensate & cannabinoid compounds. *Toxicology and Applied Pharmacology*. Vol 214(3), Page 270-290.

Spear, L. (2002). Adolescent brain the college drinker: Biological basis of propensity to use and misuse alcohol. *Journal of Studies on Alcohol*. Vol 14, Page 71-81.

Stevens-Smith, P & Smith, L.R. (1998). *Substance Abuse Counseling: Theory & Practice*. New Jersey: Prentice- Hall Inc.

Sutherland, K.L. (2001). *Juvenile Delinquency*. Boston: Sage Publication.

Tobacco Control Act no. 83 of 1993 (as amended), South Africa. Cape Town: Butterworth.

Trojanowicz, R.C. (1992). *Juvenile Delinquency*. New Jersey: Prentice-Hall Inc.

Walters, J.P. (2000). *Drug- Related Crime*. New York: Mc-GrawHill Companies.

Wilson, H.T. (2005). *Drugs, Society & Behavior*. United State of America: McGraw Hill Companies.

Zhang, L. Wieczorek, W.F. Welte, J.W. (1997). Clinical and experimental research. *Alcoholism*. Vol 21 (7), Page 1264-1275.

APPENDIX A

University of Limpopo
Private bag x1106
Sovenga
0721
01 January 2006

The Principal

Sir/Madam

I am a registered master's student in criminology at the above university. I am presently engaged in research on substance abuse in your school. As this research will include children under the age of 18 years, I seek your permission to include them in my project.

Thanking you in anticipation

Yours faithfully

Rakubu K.A

APPENDIX B

The study of substance abuse amongst a group of high school learners

Questionnaire

Questionnaire Number _____

Personal Information

1. What is your gender?

Male	Female	
1	2	

2. What is your age?

13-16	17-20	21-24	
1	2	3	

3. What is your religion?

African Traditional Religion	Christianity	Islam	Other	
1	2	3	4	

Educational Level

4. Grade

Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	
1	2	3	4	5	

5. Mother's Education

No Education	Primary	Secondary	Tertiary	Other	
1	2	3	4	5	

6. Father's Education

No Education	Primary	Secondary	Tertiary	Other	
1	2	3	4	5	

7. Guardian's Education

No Education	Primary	Secondary	Tertiary	Other	
1	2	3	4	5	

Family Characteristics

8. Who do you live with?

Both Parents	Mother Only	Father Only	Grandparents	Siblings	Family members	Alone	Other	
1	2	3	4	5	6	7	8	

9. If alone, where are your parents?

Both working	Only mother working	Only father working	Deceased	Disappeared	Other	
1	2	3	4	5	6	

10. My Parents are:

Married	Never Married	Divorced	Separated	
1	2	3	4	

11. Number of siblings

1-5	6-10	11+	
1	2	3	

12. Mother's Employment

Unemployed	Self Employed	Domestic Worker	Professional Worker	Other	
1	2	3	4	5	

13. Father's Employment

Unemployed	Self Employed	Domestic Worker	Professional Worker	Other	
1	2	3	4	5	

14. Guardian's Employment

Unemployed	Self Employed	Domestic Worker	Professional Worker	Other	
1	2	3	4	5	

15. What is your total monthly family income?

R500-R1500	R2000-R3500	R4000-R6500	R7000+	Other	
1	2	3	4	5	

Substance Abuse Scale

16. Do you abuse substances?

Yes	No	
1	2	

17. If yes, name them

Marijuana	Cocaine	Alcohol	Cigarette	Snuff	Other	
1	2	3	4	5	6	

Characteristics of Drugs Abuse

18. How old were you when you started abusing substances?

-10	11	12	13	14	15	16	17	Other	
1	2	3	4	5	6	7	8	9	

19. Where are you likely to abuse substances?

School	Home	Both	Other	
1	2	3	4	

20. When are likely to abuse substances?

Bored	Stressed	Happy	Tired	Anytime	Other	
1	2	3	4	5	6	

21. If you could estimate, how often do you smoke?

Once every day	Twice a day	More than twice a day	Other	
1	2	3	4	

22. Who taught you?

Friends	Family Members	Strangers(Media)	Other	
1	2	3	4	

Funding of Drug Abuse

23. Where do you get money to buy substances?

Parents	Friends	Relatives	Stranger	Other	
1	2	3	4	5	

24. How do you get it (money)?

Stealing	Working	Pocket money	Other	
1	2	2	4	

Suppliers of Drugs

25. Where do you buy these substances?

School	Community	Both	Other	
1	2	3	4	

26. Who is selling to you?

Friends	Relatives	Strangers	All of the above	Other	
1	2	3	4	4	

Criminal Involvement and Drug Abuse

27. Have you ever being involved in any criminal activities after a usage of a substance?

Yes	No	
1	2	

28. If yes, name those criminal activities?

Assault	Robbery	Rape	Theft	Housebreaking	Other	
1	2	3	4	5	6	

The Effects of Drugs

29. Have you ever heard about the effects of substance abuse?

Yes	No	
1	2	

30.If yes, how do you feel about them?

Real	Not Real	Other	
1	2	3	

Factors causing substance Abuse

31.What are the factors encouraging you to abuse substances?

Peer Pressure	Stress	Lack of parental control	Poor School Performance	Family Problems	Feeling of loneliness/ rejection	Lack of recreational Facilities	Other	
1	2	3	4	5	6	7	8	

School Authorities and Abuse of Substances

32.Are your school authorities aware that you abuse substances?

Yes	No	
1	2	

33. If yes, what are the measures taken?

Suspension	Corporal Punishment	Nothing	Other	
1	2	3	4	

34.If measures are taken, are they effective?

Effective	Not effective	
1	2	

Parents/Guardians and substance abuse

35. Are your parents/ guardians aware that you are abusing substances?

Yes	No	
1	2	

36. What are they doing to solve the problem?

Punishment	Shout/Scold	Counseling	Rehabilitation	Other	
1	2	3	4	5	

APPENDIX C

UNIVERSITY OF LIMPOPO ETHICS COMMITTEE

APPLICATION FOR HUMAN EXPERIMENTATION

PROJECT TITLE:

A study of substance abuse amongst a group of high school learners in the Eisleben (Botlokoa) area of the Limpopo Province

PROJECT LEADER: Ms KA Rakubu

DECLARATION

I, KA Rakubu, hereby apply for approval to execute the experiments described in the attached protocol and declare that:

1. I am fully aware of the contents of the Guidelines of Ethics for Medical Research Revised Edition (1993) and that I will abide by the guidelines as set out in that document (available from the chairperson of the Ethics Committee); and
2. I undertake to provide every person who participates in any of the stipulated experiments with the information in Part II. Every participant will be requested to sign Part III.

Name of Researcher: Ms. K.A Rakubu

Signature:

Date:

.....

-

For Official use by the Ethics Committee:

Approved/Not Approved
Remarks:

Signature of Chairperson:
Date:

PROJECT TITLE: A study of substance abuse amongst high school learners in the Eisleben (Botlokoa) area of Limpopo Province.

PROJECT LEADER: Ms. K.A Rakubu

APPLICATION FOR HUMAN EXPERIMENTATION: PART II

Protocol for the execution of experiments involving humans

1. Department: Criminology & Criminal Justice: School of Social Sciences
2. Title of project: A study of substance abuse amongst a group of high school learners
3. Full name, surname and qualifications of project leader:
Kholofelo Annah Rakubu BA Hons (Criminology)
4. List the name(s) of all persons (Researchers and Technical Staff) involved with the project and identify their role(s) in the conduct of the experiment:

Name:	Qualifications:	Responsible for:
--------------	------------------------	-------------------------

5. Name and address of supervisor: Professor C.J Moolman, Department of Criminology & Criminal Justice, University of Limpopo
6. Procedures to be followed:
 - a. Extensive literature study
 - b. Data collection
 - c. Report writing
7. Nature of discomfort: The questions might arouse some undesirable emotions in the participants
8. Descriptions of the advantages that may be expected from the results of the study:
Knowledge and insight into the nature and extent of substance abuse amongst a group Of high school learners in Eisleben (Botlokoa) area of the Limpopo Province

Signature of Project Leader:

Date:

PROJECT TITLE: A study of substance abuse amongst a group of high school learners in the Eisleben (Botlokoa) area of the Limpopo Province

PROJECT LEADER: Ms KA Rakubu

APPLICATION FOR HUMAN EXPERIMENTATION: PART II

INFORMATION FOR PARTICIPANTS

1. You are invited to participate in the following research project/ experiment:

A study of substance abuse amongst a group of high school learners in the Eisleben (Botlokoa) area of the Limpopo Province
2. Participation in the project is completely voluntary and you are free to withdraw from the project/ experiment (without providing any reasons) at any time. You are, however, requested not to withdraw without careful consideration since such action might negatively affect the project/ experiment.
3. It is possible that you might not personally experience any advantages during the experiment/ project, although the knowledge that may be accumulated through the project/ experiment might prove advantageous to others.
4. You are encouraged to ask any questions that you might have in connection with this project/ experiment at any stage. The project leader and her/ his staff will gladly answer your question. They will also discuss the project/ experiment in detail with you.
5. Your involvement in the project.
The researcher will be using both qualitative and quantitative methods of data collection. Unstructured interviews will be used. In this technique, there are no specifications in the wording of the questions or the order of the questions. The unstructured interview has no limit for continuing the interview and can be conducted in the form of a natural conversation.
6. In order to protect your identity, you are not requested to mention your name or address.

UNIVERSITY OF LIMPOPO ETHICS COMMITTEE

PROJECT TITLE: A study of substance abuse amongst a group of high school learners in the Eisleben (Botlokoa) area of the Limpopo Province.

PROJECT LEADER: Ms KA Rakubu

CONSENT FORM

I, hereby voluntarily consent to participate in the following project: **A study of substance abuse amongst a group of high school learners in the Eisleben (Botlokoa) area of the Limpopo Province**

I realise that:

1. The study deals with the extent of substance abuse in the high schools in the Eisleben (Botlokoa) area of the Limpopo Province and the detrimental effects it has on the educational progress, personal and social life of the students
2. The procedure or treatment envisaged might hold some risk for me that cannot be foreseen at this stage;
3. The Ethics Committee has approved that individuals may be approached to participate in the study.
4. The experimental protocol, i.e. the extent, aims and methods of the research, has been explained to me;
5. The protocol sets out the risks that can be reasonably expected as well as possible discomfort for persons participating in the research, an explanation of the anticipated advantages for myself or others that are reasonably expected from the research and alternative procedures that may be to my advantage;
6. I will be informed of any new information that may become available during the research that may influence my willingness to continue my participation
7. Access to the records that pertain to my participation in the study will be restricted to persons directly involved in the research;

8. Any questions that I may have regarding the research, or related matters, will be answered by the researcher;
9. If I have any questions about, or problems regarding the study, or experience any undesirable effects, I may contact a member of the research team;
10. Participation in this research is voluntary and I can withdraw my participation at any stage:
11. If any medical problem is identified at any stage during the research, or when I am vetted for participation, a qualified person will discuss such condition with me in confidence and/ or I will be referred to my doctor;
12. I indemnify the University of Limpopo and all persons involved with the above project from any liability that may arise from my participation in the above project or that may be related to it, for whatever reasons, including negligence on the of the mentioned persons.

SIGNATURE OF RESEARCHED PERSON

SIGNATURE OF WITNESS

SIGNATURE OF PERSON THAT INFORMED
THE RESEARCHED PERSON

SIGNATURE OF PARENT/GUARDIAN

Signed at _____ this ____ day of _____ 2006